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Research Interests

1. AI
2. Mobile, Cloud, and Cyber-physical Security
3. AI Agents
4. Software Engineering
5. Deployment and Configuration Optimization
6. Distributed Systems and Cloud Computing

Educational Background

- December, 2008, Ph.D., Computer Science, Vanderbilt University
- May, 2006, MS, Computer Science, Vanderbilt University
- May, 2001, BA, Computer Science, Brown University

Appointments

1. 2023-present, Senior Advisor to the Chancellor on Generative AI
2. 2023-present, Professor, Computer Science, Vanderbilt University
3. 2021-2023, Associate Dean of Strategic Learning Programs, School of Engineering, Vanderbilt University
4. 2018-2023, Associate Professor, Computer Science, Vanderbilt University
5. 2013-2018, Assistant Professor, Computer Science and Computer Engineering, Vanderbilt University
6. 2014-2019, President, Ziiio, Inc.
7. 2015-2017, Chief Scientist, Optio Labs
8. 2012-2015, Chief Scientist, Cloudpoint/PAR Works
9. 2014-2018, Board Member, KTK-Belt Foundation
10. 2012-2014, Chief Technology Officer, Optio Labs
11. 2010-2013, Assistant Professor, Electrical and Computer Engineering, Virginia Tech
12. 2011-2012, Visiting Scientist, Software Engineering Institute, Carnegie Mellon
13. 2009-2010, Research Assistant Professor, Electrical Engineering and Computer Science, Vanderbilt University

14. 2004-2008, Research Assistant, Distributed Object Computing Group, Vanderbilt University
15. 2006-summer, Summer Intern, Siemens Corporate Technology SE6, Munich, Germany
16. 2001-2002, IBM Enterprise Application Developer
17. 2002, Art Editor, American Center for Artists, website (www.americanartists.org)
18. 2002, Design and Technology Director, Christopher Isherwood Foundation, Santa Monica, California
19. 2000, Chief Software Architect, Software Teacher Inc.
20. 1997-1999, Art Instructor, Bay Rivers Art Guild

Honors & Awards

1. 2024 Coursera Innovation Award
2. 1,000,000 learners enrolled in my Generative AI courses on Coursera and LinkedIn Learning
3. Led the Online MS in CS at Vanderbilt to the #1 Ranking by Fortune for Online MS in CS Programs
4. Best Paper Award, International Conference on Sports Sciences Research and Technology Support 2021
5. First Place, Accuracy, NeurIPS NL2CMD Competition, 2020
6. NSF CAREER Award, CAREER: At-scale Analysis of Issues in Cyber-security and Software Engineering, CNS-1552836
7. Virginia Tech Outstanding New Assistant Professor, 2014
8. Best Paper Award, International Conference on Software Product-lines, 2008
9. Best Paper Award, International Conference on Construction Applications of Virtual Reality, 2013
10. Best Paper Award, ASCE International Workshop on Computing in Civil Engineering, 2012
11. Best Presentation Award, International Conference on Future Computers and Communications
12. Best Student Paper Award, IEEE International Symposium on Parallel and Distributed Processing with Applications, 2013
13. Best Student Paper Award, International Conference on Pervasive and Embedded Computing and Communications, 2011
14. Virginia Tech Student Engineering Council Finalist for the Undergraduate Research Advisor Award, 2015
15. Virginia Center for Innovative Technology GAP 50 Entrepreneur Award Finalist, 2015
16. Taxi Project, CS 279, Finalist in the Multi-city Innovation Campaign, 2014
17. Indoor Navigation Project, CS 279, Tied for 1st in the Multi-city Innovation Campaign, 2014

Journal Papers

- J1. Ashraf Elnashar, Douglas C. Schmidt, and Jules White, Preference-Driven Prompt Refinement for Software Development: A Cross-Model Analysis of GPT-5, Journal of System Architecture, April, 2026.
- J2. Ashraf Elnashar, Douglas C. Schmidt, and Jules White, Preference-Driven Refinement of Prompts: A Systematic Prompt Engineering Method for Helping to Automate Software Engineering, Journal of Software, Volume 21, Number 1, 2026.

- J3. Ashraf Elnashar, Douglas C. Schmidt, and Jules White, Prompt Engineering for Structured Data: A Comparative Evaluation of Styles and LLM Performance, *Journal of Artificial Intelligence and Autonomous Systems*, ELSP, Volume 2, Number 2, 2025.
- J4. Ashraf Elnashar, Jules White, and Douglas C. Schmidt, Enhancing Structured Data Generation with GPT-4o Evaluating Prompt Efficiency Across Prompt Styles, *Frontiers in Artificial Intelligence*, March 25th, 2025, Volume 8, pp. 1--13.
- J5. Cathy Shyr, Randall W. Grout, Nan Kennedy, Yasemin Akdas, Maeve Tischbein, Joshua Milford, Jason Tan, Kaysi Quarles, Terri L. Edwards, Laurie L. Novak, Jules White, Consuelo H. Wilkins, Paul A. Harris, Leveraging artificial intelligence to summarize abstracts in lay language for increasing research accessibility and transparency, *Journal of the American Medical Informatics Association*, ocae186, July 2024
- J6. Douglas C. Schmidt, Jesse Spencer-Smith, Quchen Fu, and Jules White, Towards a Catalog of Prompt Patterns to Enhance the Discipline of Prompt Engineering, *Ada User Journal (AUJ)*, Volume 44, Number 2, pp. 220-227, September 2023
- J7. Yu Yao, Maria Powell, Jules White, Jian Feng, Quchen Fu, Peng Zhang, and Douglas C. Schmidt, A Multi-stage Diagnosis Strategy based on Transfer Learning for a Class of Rare Laryngeal Movement Disorders, *Elsevier Computers in Biology and Medicine*, Volume 166, pp. 1-12, 2023
- J8. *Michael Sandborn, *Zachary Stoeber, *Westley Weimer, *Stephanie Forrest, *Ryan Dougherty, Jules White, Kevin Leach, Reducing Malware Analysis Overhead with Coverings, *Transactions on IEEE Transactions on Dependable and Secure Computing* (to appear)
- J9. *Quchen Fu, Ramesh Chukka, Keith Achorn, Thomas Atta-fosu, Deepak R. Canchi, Zhongwei Teng, Jules White, Douglas C. Schmidt, Deep Learning Models on CPUs: A Methodology for Efficient Training, *Journal of Machine Learning Theory, Applications and Practice* (to appear)
- J10. *Quchen Fu, *Zhongwei Teng, *Marco Georgaklis, Jules White, Douglas C. Schmidt, NL2CMD: An Updated Workflow for Natural Language to Bash Commands Translation, *Journal of Machine Learning Theory, Applications and Practice* (to appear)
- J11. *Peng Zhang, Christopher Fannesbeck Shelagh Mulvaney, Jules White, Douglas C. Schmidt, Understanding Barriers to Diabetes Self-Management Using Momentary Assessment and Machine Learning, *Journal of Medical Internet Research*, Volume 10, Number 3, March, 2022
- J12. *Zhongwei Teng, Jules White, Jonathan Nesbitt, Douglas C. Schmidt, Authentication & Integration Approaches for mHealth Apps Supporting Patient Reported Outcomes, *Journal of Advances in Electrical and Electronic Engineering*, Volume 19, Number 1, pp. 74-89, 2021
- J13. *Michael Sandborn, *Carlos Olea, Jules White, Chris Williams, Pablo A. Tarazaga, *Logan Sturm, Mohammad Albakri, *Charles Tenney, Towards Secure Cyber-physical Information Association for Parts, *Journal of Manufacturing Systems*, Volume 59, pp. 27-41, April 2021
- J14. Peng Zhang, Chris Downs, Nguyen Thanh Uyen Le, Cory Martin, Paul Shoemaker, Clay Wittwer, **Luke Mills, **Liam Kelly, Stuart Lackey, Douglas Schmidt, Jules White, Towards Patient-Centered Stewardship of Research Data and Research Participant Recruitment with Blockchain Technology, *Frontiers in Blockchain*, Volume 11, Number 12, pp. 12-32, July, 2020
- J15. *Josh Brandman, *Logan Sturm, Jules White, Chris Williams, A Physical Hash for Preventing and Detecting Cyber-Physical Attacks in Additive Manufacturing Systems, *Journal of Manufacturing Systems*, Volume 56, pp. 202-212, July, 2020
- J16. *Yao Pan, *Fangzhou Sun, *Zhongwei Teng, Jules White, Douglas C. Schmidt, Jacob Staples, Lee Krause, Detecting Web Attacks with End-to-End Deep Learning, *Journal of Internet Services and Applications*, Volume 10, Number 16, August 2019
- J17. Maria E. Powell, Marcelino Rodriguez Cancio, David Young, *William Nock, Beshoy Abdelmessih, Amy Zeller, Irvin Perez Morales, Dana Zhang, C Gaeleyn Garrett, Douglas Schmidt, Jules White, and Alexander Gelbard, Decoding Phonation with Artificial Intelligence (DEP AI): Proof of Concept, Volume 4, Number 3, pp. 328-334, June, 2019

- J18. *Peng Zhang, *Breck Stodghill, *Cory Pitt, Cavan Briody, Douglas C. Schmidt, Jules White, Alan Pitt, and Kelly Aldrich, OpTrak: Tracking Opioid Prescriptions via Distributed Ledger Technology, the International Journal of Information Systems and Social Change (IJISSC), Special Issue On: Blockchain Technology: Platforms, Tools, and Use Cases, IGI Global, 2018
- J19. *Peng Zhang, Jules White, Douglas C. Schmidt, Gunther Lenz, S. Trent Rosenbloom, FHIRChain: Applying Blockchain to Securely and Scalably Share Clinical Data, Elsevier Computational and Structural Biotechnology Journal -- Blockchain and Distributed Ledger Technologies in Biology, Medicine, and eHealth Special Issue, Volume 16, pp. 267-278, 2018
- J20. *Yao Pan, Jules White, Yu Sun, Jeff Gray, Gray Computing: A Framework for Computing with Background JavaScript Tasks, IEEE Transactions on Software Engineering, Volume 45, Issue 2, pp. 171-193, 2019
- J21. *Fangzhou Sun, Abhishek Dubey, Jules White, Aniruddha Gokhale, Transit-Hub: A Smart Public Transportation Decision Support System with Multi-timescale Analytical Services, Journal of Cluster Computing special issue on Dynamic Data Driven Applications Systems, Volume 22, Issue 1, pp. 2239-2254, 2019
- J22. *Logan Sturm, Chris Williams, Jaime Camelio, Jules White, Robert Parker, Cyber-physical vulnerabilities in additive manufacturing systems: A case study attack on the STL file with human subjects, LD Sturm, CB Williams, JA Camelio, J White, R Parker - Journal of Manufacturing Systems, Volume 44, Number 1, pp. 154-164, 2017
- J23. *Yao Pan, Jules White, Douglas C. Schmidt, *Ahmad Elhabashy, *Logan Sturm, Jaime Camelio, Christopher Williams, Taxonomies for Reasoning About Cyber-physical Attacks in Advanced Manufacturing Systems, Special Issue on Advances and Applications in the Internet of Things, International Journal of Interactive Multimedia and Artificial Intelligence, Volume 4, Number 3, pp. 45-54, 2017
- J24. *Hyojoon Bae, *Michael Walker, Jules White, *Yao Pan, Yu Sun, Mani Golparvar-Fard, Fast and Scalable Structure-from-Motion based Localization for High-precision Mobile Augmented Reality Systems, Springer Journal of Mobile User Experience, Volume 5, Number 4, pp. 1-21 / online, December, 2016
- J25. Yu Sun, Jules White, *Bo Li, *Hamilton Turner, *Michael Walker, Automated QoS-Oriented Cloud Resource Optimization using Containers, Springer Automated Software Engineering Journal, Volume 24, Number 1, pp. 101-137, March, 2017
- J26. *Thaddeus Czauski, Jules White, Yu Sun, Sean Eade, Douglas C. Schmidt, NERD - Middleware for IoT Human Machine Interfaces, Annals of Telecommunications, Volume 71, Issue 3, pp. 109-119, April, 2016
- J27. Yu Sun, Jules White, Sean Eade, Douglas C. Schmidt, ROAR: A QoS-Oriented Modeling Framework for Automated Cloud Resource Allocation and Optimization, Journal of Software and Systems, Volume 116, pp. 146-161, June, 2016
- J28. *Jose Galindo, David Benavides, *Hamilton Turner, Jules White, Testing Variability Intensive Systems Using Automated Analysis: An application to Android, Springer Journal of Systems and Software, Volume 24, Issue 2, pp. 365-405, June, 2016
- J29. *Hyojoon Bae, Jules White, Mani Golparvar-Fard, *Yao Pan, Yu Sun, Fast and Scalable 3D Cyber-physical Modeling for High-precision Mobile Augmented Reality Systems, Springer Journal of Personal and Ubiquitous Computing, Volume 19, Number 8, pp. 1275-1294, December, 2015
- J30. Max Robert, Yu Sun, Thomas Goodwin, *Hamilton Turner, Jeff Reed, Jules White, Software Frameworks for SDR, Proceedings of the IEEE, Volume 103, Number 3, pp. 452-475, April, 2015
- J31. Yu Sun, Jules White, Jeff Gray, A Demonstration-based Model Transformation Approach to Automate Model Scalability, Journal of Software and Systems Modeling, Volume 14, Issue 3, pp. 1245-1271, July, 2015

- J32. *Hamilton Turner¹, Jules White, **Brandon Amos, Jaime Camelio, Chris Williams, and Robert Parker, Bad Parts: Are Our Manufacturing Systems At Risk of Silent Cyber-attacks?, IEEE Security & Privacy, Volume 3, Issue 3, pp. 40-47, May/June, 2015
- J33. *Hyojoon Bae, Mani Golparvar-Fard, Jules White, Image-based Localization and Content Authoring in Structure-from-Motion Point Cloud Models for Real-time Field Reporting Applications, ASCE Journal of Computing in Civil Engineering, Volume 29, Issue 4, pp. 1-13 online, July, 2015
- J34. *Hamilton Turner, Brian Dougherty, Jules White, Russell Kegley, Jonathan Preston, Douglas C. Schmidt, and Aniruddha Gokhale. DRE System Performance Optimization with the SMACK Cache Efficiency Metric, Springer Journal of Systems and Software, Volume 98, pp. 25-43, 2014
- J35. Jules White, Douglas C. Schmidt, Mani Golparvar-Fard, Guest Editorial to the Special Issue on Applications of Augmented Reality, Proceedings of the IEEE, Volume 2, Number 2, pp. 120-123, 2014
- J36. *James Edmondson, William Anderson, Jeff Gray, Joe Loyall, Jules White, and Klaus Schmid, Guest Editorial to the Special Section on Next Generation Mobile Computing, IEEE Software, Volume 31, Number 2, pp. 44-47, March/April 2014
- J37. Jaime Camelio, *Lee J Wells, Christopher B Williams, Jules White, Cyber-Physical Security Challenges in Manufacturing Systems, Manufacturing Letters, Volume 2, Number 2, pp. 74-77, 2014
- J38. Jules White, David Benavides, *Tripti Saxena, *Brian Dougherty, Douglas C. Schmidt, *Jose A. Galindo, Evolving Feature Model Configurations in Software Product Lines, Journal of Software and Systems, Volume 87, pp. 119-136, 2014
- J39. *Hyojoon Bae, Mani Golparvar-Fard, Jules White, A High-precision Vision-based Mobile Augmented Reality System for Context-aware AEC/FM Applications, International Journal of Visualization in Engineering, Volume 1, Number 1, pp. 1-13, 2013
- J40. *Yu Sun, Jeff Gray, Romain Delamare, Benoit Baudry, Jules White, Automating the Management of Non-functional System Properties Using Demonstration-based Model Transformation, Journal of Software Maintenance and Evolution Research and Practice, incorporating Software Process and Practice, Volume 25, Issue 12, pp. 1335-1356, 2013
- J41. *Brian Dougherty, Jules White, Douglas C. Schmidt, Model-driven Auto-scaling of Green Cloud Computing Infrastructure, Future Generation Computer Systems, Volume 28, Number 2, pp. 371-378, February, 2012
- J42. Jules White, *Brian Dougherty, Richard Schantz, Douglas C. Schmidt, Adam Porter, and Angelo Corsaro, R&D Challenges and Solutions for Highly Complex Distributed Systems - a Middleware Perspective, the Springer Journal of Internet Services and Applications special issue on the Future of Middleware, Volume 2, Number 3, pp. 1-8, December 2011
- J43. *Jianmei Guo, Jules White, Guangxin Wang, Jian Li, Yinglin Wang, A Genetic Algorithm for Optimized Feature Selection with Resource Constraints in Software Product Lines, Journal of Software and Systems, Volume 84, Number 12, pp. 2209-2221, 2011

* Graduate student author

** Undergraduate student author

- J44. *Brian Dougherty, *Daniel Guymon, Jules White, and Douglas C. Schmidt, Overcoming Cellular Connectivity Limitations with M2Blue Autonomic Distributed Data Caching, CSI Communications, August, 2011
- J45. Jules White, **Chris Thompson, *Hamilton Turner, *Brian Dougherty, Douglas C. Schmidt, WreckWatch - Automatic Traffic Accident Detection and Notification with Smartphones, Springer Journal of Mobile Applications and Networks, Volume 16, Number 3, pp. 285-303, June, 2011
- J46. *Brian Dougherty, Jules White, Douglas C. Schmidt, Automated Software and Hardware Evolution Analysis for Distributed Real-time and Embedded Systems, The Central European Journal of Computer Science, 2011
- J47. Jules White, *Hamilton Turner, Smartphone Computing in the Classroom, IEEE Pervasive Computing, Volume 10, Issue 2, pp. 82-86, April-June, 2011
- J48. *Brian Dougherty, Jules White, Douglas C. Schmidt, Russell Kegley, Jonathan Preston, Deployment Optimization for Embedded Flight Avionics Systems, CrossTalk Journal, Volume 24, Number 6, pp. 1-8, 2011
- J49. Jules White, *Brian Dougherty, **Chris Thompson, Douglas C. Schmidt, ScatterD- Spatial Deployment Optimization with Hybrid Heuristic / Evolutionary Algorithms, ACM Transactions on Autonomous and Adaptive Systems Special Issue on Spatial Computing, Volume 6, Number 3, pp. 1-25, September, 2011
- J50. Jules White, *Brian Dougherty, Douglas C. Schmidt, ASCENT- An Algorithmic Technique for Designing Hardware and Software in Tandem, IEEE Transactions on Software Engineering Special Issue on Search-based Software Engineering, Volume 35, Number 6, pp. 838-851, November/December, 2010.
- J51. Jules White, Sibohan Clarke, *Brian Dougherty, **Chris Thompson, Douglas C. Schmidt, R&D Challenges and Solutions for Mobile Cyber-Physical Applications and Supporting Internet Services, Springer Journal of Internet Services and Applications, Volume 1, Number 1, 2010, pp. 45-56.
- J52. Jules White, David Benavides, Douglas C. Schmidt, Pablo Trinidad, Antonio Ruiz-Cortes, *Brian Dougherty, Automated Diagnosis of Feature Model Configurations, Journal of Systems and Software, Volume 83, Number 7, pp. 1094-1107, July, 2010
- J53. Jules White, *James Hill, Jeff Gray, *Sumant Tambe, Douglas C. Schmidt, Anirrudha Gokhale, Improving Domain-specific Language Reuse through Software Product-line Configuration Techniques, IEEE Software Special Issue on Domain-Specific Languages and Modeling July/August, 2009, Volume 26, Number 4, pp. 47-53
- J54. Jules White, *Brian Dougherty, Douglas C. Schmidt, Selecting Highly Optimal Architectural Feature Sets with Filtered Cartesian Flattening, Journal of Systems and Software, Volume 82, Number 8, pp. 1268-1284, August 2009 (1 of the top 10 most cited papers in JSS from 2009)
- J55. Jules White, Jeff Gray, Douglas C. Schmidt, Constraint-based Model Weaving, Springer Transactions on Aspect-Oriented Software Development Special Issue on Aspects and Model-Driven Engineering, 2009, Volume 5560, Number 6, pp. 153-190
- J56. Jules White, Douglas C. Schmidt, Automating Deployment Planning with an Aspect Weaver, IET Software Special Issue on Domain-specific Modeling Languages for Aspect-Oriented Programming, Volume 3, Issue 3, pp. 167-183, June 2009

- J57. Jules White, **Harrison Strowd, Douglas C. Schmidt, Creating Self-healing Service Compositions with Feature Models and Microbooting, International Journal of Business Process Integration and Management, Special issue on Model-Driven Service-Oriented Architectures, Inderscience Publishers, pp. 35-46, Volume 4, Number 1, 2009
- J58. Jules White, Douglas C. Schmidt, Andrey Nechypurenko, Egon Wuchner, Model Intelligence- an Approach to Modeling Guidance, UPGRADE Journal, Volume 9, Number 2, pp. 22-28, April 2008
- (Spanish Translation of Model Intelligence) Jules White, Douglas C. Schmidt, Andrey Nechypurenko, Egon Wuchner, Inteligencia de modelos- un enfoque para guiar el modelado, Novatica, Number 192, pp. 21-27, April 2008, (one of five Finalists for the Novatica "Best Paper of the Year" Award), 2008
- J59. Jules White, Douglas C. Schmidt, Egon Wuchner, Andrey Nechypurenko, Automatically Composing Reusable Software Components for Mobile Devices, Journal of the Brazilian Computer Society Special Issue on Software Reuse, SciELO Brasil, Volume 14, Number 1, pp. 25-44, March, 2008
- J60. Jules White, Douglas Schmidt, Aniruddha Gokhale, Simplifying Autonomic Enterprise Java Bean Applications via Model-driven Engineering and Simulation, Journal of Software and Systems Modeling, Springer, Volume 7, Number 1, pp. 3-23, May, 2007 (9th most cited and 11th most downloaded Software and Systems Modeling paper as of Oct. 2009)

Conference Publications

- C1. William Schreiber, Douglas C. Schmidt, and Jules White, The Multi-Persona Integration Pattern: Comparing Large Language Models Applied to Medical Advice, proceedings of the 32nd PLoP Conference: October 12-15, 2025, Columbia River Gorge, Washington USA.
- C2. Ashraf Elnashar, Douglas C. Schmidt, and Jules White, Preference-Driven Refinement of Prompts: A Systematic Prompt Engineering Method for Helping to Automate Software Engineering, Proceedings of the 12th International Conference on Artificial Intelligence (ICOAI 2025), October 27-29, 2025, Paris, France.
- C3. *Ashraf Elnashar, Max Moundas, Douglas C. Schmidt, Jesse Spencer-Smith, Jules White, Evaluating the Performance of LLM-Generated Code for ChatGPT-4 and AutoGen Along with Top-Rated Human Solutions, 19th International Conference on Software Technologies, Dijon, France, July 8-10, 2024 (Received the Best Student Paper Award)
- C4. *Williams Schrieber, *Carlos Olea, Max Moundas, Jules White, Douglas C. Schmidt, Extending the Persona Pattern in Prompt Engineering for Large Language Models, 31st PLoP Conference, October 13-16, 2024, Washington, USA
- C5. Max Moundas, Jules White, Douglas C. Schmidt, Prompt Patterns for Structured Data Extraction from Unstructured Text, 31st PLoP Conference, October 13-16, 2024, Washington,
- C6. *Carlos Olea, Holly Tucker, *Jessica Phelan, *Cameron Pattison, Shen Zhang, Maxwell Lieb, Doug Schmidt, Jules White, Evaluating Personified Expert Effectiveness, International Conference on Artificial Intelligence and Soft Computing, Jun. 22-23, 2024, Sydney, Australia
- C7. *Ashraf Elnashar, *Max Moundas, Douglas C. Schimdt, Jesse Spencer-Smith, Jules White, Prompt Engineering of ChatGPT to Improve Generated Code & Runtime Performance

- Compared with the Top-Voted Human Solutions, 2023 IEEE 22nd International Conference on Cognitive Informatics & Cognitive Computing, Aug. 19-21, 2023, Stanford, CA
- C8. José A. Galindo, Antonio J Dominguez, Jules White and David Benavides, Large Language Models to Generate Meaningful Feature Model Instances, 27th ACM International Software Product Lines Conference, Aug. 28- Sept. 1, 2023, Tokyo, Japan
- C9. Carlos Olea, Michael Sandborn, Peter Volgyesi and Jules White, String Grammars for Preliminary UAV Design Exploration, 14th International Conference on Mechanical and Aerospace Engineering, Jul. 18-21, 2023, Porto, Portugal
- C10. Douglas C. Schmidt, Jesse Spencer-Smith, Quchen Fu and Jules White, Cataloging Prompt Patterns to Enhance the Discipline of Prompt Engineering, International Conference on Reliable Software Technologies, June 13-16, 2023, Lisbon, Portugal
- C11. *Michael Sandborn, *Carlos Olea, *Anwar Said, Mudassir Shabbir, Peter Volgyesi, Xenofon Koutsoukos, Jules White, What a Drag! Streamlining the UAV Design Process with Design Grammars and Drag Surrogates, International Conference on Computational Science and Computational Intelligence, Dec. 14-16, 2022, Las Vegas (24% acceptance rate)
- C12. *Ashraf Elnashar, *William Schreiber, Jules White, Douglas C. Schmidt, Question Formulation and Transformer Resilience, International Conference on Computational Science and Computational Intelligence, Dec. 14-16, 2022, Las Vegas (24% acceptance rate)
- C13. Sam Hays, Jules White, Using Contracts to Improve Security through Responsibility Bifurcation, European Symposium on Software Engineering, Rome, Italy, Oct. 27-29, 2022
- C14. Zhongwei Teng, Quchen Fu, Jules White, Maria Powell, Douglas C. Schmidt, ARawNet: A Lightweight Solution for Leveraging Raw Waveforms in Spoof Speech Detection, International Conference on Pattern Recognition, August 21-25, 2022, Montreal, Quebec
- C15. *Quchen Fu, *Zhongwei Teng, Jules White, Maria E. Powell, and Douglas C. Schmidt, FastAudio: A Learnable Audio Front-End for Spoof Speech Detection, IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), May 22-27, 2022, Singapore
- C16. *Quchen Fu, *Zhongwei Teng, Jules White, Douglas C. Schmidt, A Transformer-based Approach for Translating Natural Language to Bash Commands, 20th IEEE International Conference on Machine Learning and Applications, December 13-16, 2021, Pasadena, CA (25% Acceptance Rate)
- C17. *Zhongwei Teng, *Quchen Fu, Jules White, Douglas C. Schmidt, "Generating Data Visualizations from Hand-drawn Sketches Using Deep Learning", 20th IEEE International Conference on Machine Learning and Applications, December 13-16, 2021, Pasadena, CA (25% Acceptance Rate)
- C18. *Gabriela Gresenz, Jules White, and Douglas C. Schmidt, An Off-road Terrain Dataset Including Images Labeled with Measures of Terrain Roughness, IEEE International Conference on Autonomous Systems, August 11-13, 2021, Montreal, CA (25% Acceptance Rate)
- C19. Mayank Agarwal, Tathagata Chakraborti, Quchen Fu, David Gros, Xi Victoria Lin, Jaron Maene, Kartik Tala-madupula, Zhongwei Teng, and Jules White, NeurIPS 2020 NL2CMD Competition: Translating Natural Language to Bash Commands, Neural Information Processing Systems, Competition and Demonstration Track, December 6-12, 2020
- C20. *Josh Brandman, *Logan Sturm, Jules White, Christopher Williams, A Physical Hash for Preventing and Detecting Cyber-Physical Attacks in Additive Manufacturing Systems, 2018 Annual International Solid Freeform Fabrication Symposium, August 13-15, 2018, Austin, TX
- C21. Peng Zhang, Douglas C. Schmidt, Jules White, Shelagh Mulvaney, Towards Precision Behavioral Medicine with IoT: Iterative Design and Optimization of a Self-Management Tool for Type 1 Diabetes, IEEE International Conference on Healthcare Informatics, June 4-7, 2018, New York, NY

- C22. Marcelino Rodriguez-Cancio, Benoit Baudry, and Jules White, Images of Code: Lossy Compression for Native Instructions, International Conference on Software Engineering, May 27-June 3, 2018, Gothenburg, Sweden
- C23. *Fangzhou Sun, *Peng Zhang, Jules White, Douglas Schmidt, Jacob Staples and Lee Krause, A Feasibility Study of Autonomically Detecting In-process Cyber-Attacks, IEEE International Conference on Cybernetics, June 21-23, 2017, Exeter, UK (30% acceptance rate)
- C24. *Peng Zhang, Jules White, Douglas C. Schmidt, Tom Dennis, Applying Machine Learning Methods to Predict Hand Hygiene Compliance Characteristics, 2017 IEEE International Conference on Biomedical and Health Informatics, February 16-19, 2017, Orlando, Florida (14% acceptance rate for oral presentation)
- C25. *Yao Pan, Jules White, Yu Sun, Assessing the Threat of Web Worker Distributed Attacks, IEEE Conference on Communications and Network Security, October 17-19, 2016, Philadelphia, PA (29% acceptance rate)
- C26. *Peng Zhang, Jules White, Douglas C. Schmidt, HoliCoW: Automatically Breaking Team-based Software Projects to Motivate Student Testing, International Conference on Software Engineering, Software Engineering in Education Track, Austin, TX, May 14-22, 2016
- C27. **Sam Hurd, **Carmen Camp, Jules White, Quality Assurance in Additive Manufacturing Through Mobile Computing, The 7th EAI International Conference on Mobile Computing, Applications and Services, Nov 12-13, 2015, Berlin, Germany (37% acceptance rate)
- C28. *Yao Pan, Jules White, Yu Sun, Jeff Gray, Gray Computing: An Analysis of Computing with Background JavaScript Tasks, International Conference on Software Engineering, May 16-21, 2015, Florence, Italy (18.5% acceptance rate)
- C29. Yu Sun, Jules White, Sean Eade, A Model-Based System to Automate Cloud Resource Allocation and Optimization, Models 2014, Sept 28-Oct 3, Valencia, Spain (23% acceptance rate)
- C30. Jules White, *Yao Pan, *Zack McCormick, Addressing the Challenges of HTTP-based Mobile/Cloud Interaction, IEEE International Conference on Mobile Cloud Computing, Services, and Engineering, Oxford, UK, April 8-11, 2014 (24.3% acceptance rate)
- C31. *Hamilton Turner and Jules White. Multi-core Deployment Optimization Using Simulated Annealing and Ant Colony Optimization, IEEE International Symposium on Parallel and Distributed Processing with Applications, Melbourne, Australia, July 16-18 2013 (** Received the Best Student Paper Award *** 35% acceptance rate).
- C32. **Brandon Amos, *Hamilton Turner, and Jules White, Applying Machine Learning Classifiers to Dynamic Android Malware Detection at Scale, International Security, Trust and Privacy Symposium, Cagliari, Italy, July 2013 (35% acceptance rate).
- C33. *Alan Baines, *Thaddeus Czauski, Jules White, Mani Golparvar-Fard, and Brian Dougherty, CTrack: A Cyber-Physical Approach to Construction Site Work Improvement Studies, The 9th International Wireless Communications & Mobile Computing Conference, July 1-5, 2013, Cagliari, Sardinia, Italy (35% acceptance rate).
- C34. *Hamilton Turner, *Thaddeus Czauski, *Danny Guymon, Brian Dougherty, Jules White, Dynamic Tessellation of Geographical Regions to Ensure K-Anonymity, IEEE/IFIP International Conference on Embedded and Ubiquitous Computing, Paphos, Cyprus, December 5-7, 2012 (35% acceptance rate).

- C35. *Daniel Guymon, *Alan Baines, **Jordan Scherigert, Jules White, Accelerometer-based Gesture End-user Authentication for P2P Communication on Smartphones, 4th International Conference on Future Computer and Communication, Hong Kong, August 3-5, 2012 (28% acceptance rate). (** Received the Best Presentation Award **).
- C36. *Yu Sun, Jeff Gray, Christoph Wienands, Michael Golm, Jules White, A Demonstration-based Approach to Support Live Transformations in a Model Editor, International Conference on Model Transformation, Zurich, Switzerland, June 27-28, 2011 (21% Acceptance Rate)
- C37. **Chris Thompson, *Hamilton Turner, Jules White, Douglas C. Schmidt, Analyzing Mobile Application Software Power Consumption via Model-driven Engineering, 1st International Conference on Pervasive and Embedded Computing and Communication Systems, Algarve, Portugal, March 5-7, 2011 (14% Acceptance Rate), (**Received the Best Student Paper Award**)
- C38. Jules White, David Benavides, *Brian Dougherty, Douglas C. Schmidt, Automated Reasoning for Multi-step Software Product-line Configuration Problems, Software Product-lines Conference (SPLC), 10pgs. August 24-28, 2009, San Francisco, CA (30% Acceptance Rate)
- C39. *Yu Sun, Jules White, Jeff Gray, Model Transformation by Demonstration, Proceedings of MODELS 2009, ACM/IEEE 8th International Conference on Model Driven Engineering Languages and Systems, October 4-9, 2009, Denver, Colorado (16% Acceptance Rate)
- C40. *Brian Dougherty, Jules White, *Jaiganesh Balasubramanian, **Chris Thompson, and Douglas C. Schmidt, Deployment Automation with BLITZ, 31st International Conference on Software Engineering, May 16-24, 2009 Vancouver, Canada.
- C41. Jules White, Douglas C. Schmidt, David Benavides, Pablo Trinidad, Antonio Ruiz-Cortez, Automated Diagnosis of Product-line Configuration Errors in Feature Models, Software Product Lines Conference (SPLC), 10pgs., September, 2008, Limerick, Ireland (30% Acceptance Rate), (**Received the Best Paper Award**)
- C42. Jules White, Krzysztof Czarnecki, Douglas C. Schmidt, Gunther Lenz, Christoph Wienands, Egon Wuchner, and Ludger Fiege, Automated Model-based Configuration of Enterprise Java Applications, Enterprise Computing Conference (EDOC), 12pgs., October, 2007, Annapolis, Maryland (28% Acceptance Rate)
- C43. Jules White, Douglas C. Schmidt, Egon Wuchner, Andrey Nechypurenko, Optimizing and Automating Product-Line Variant Selection for Mobile Devices, 11th Annual Software Product Line Conference (SPLC), 10pgs., September 10-14, 2007, Kyoto, Japan (35% Acceptance Rate)
- C44. Andrey Nechypurenko, Egon Wuchner, Jules White, and Douglas C. Schmidt, Application of Aspect-based Modeling and Weaving for Complexity Reduction in the Development of Automotive Distributed Realtime Embedded Systems, Proceedings of the Sixth International Conference on Aspect-Oriented Software Development, 10pgs., Vancouver, British Columbia, March 12-16, 2007 (18% Acceptance Rate)
- C45. Jules White, Douglas Schmidt, and Aniruddha Gokhale, Simplifying Autonomic Enterprise Java Bean Applications via Model-driven Development- a Case Study, Proceedings of MODELS 2005, ACM/IEEE 8th International Conference on Model Driven Engineering Languages and Systems, 11pgs., Half Moon Resort, Montego Bay, Jamaica, October 5-7, 2005. (Selected as a best paper) (27% Acceptance Rate)

- C46. Jules White, Douglas Schmidt, and Aniruddha Gokhale, The J3 Process for Building Autonomic Enterprise Java Bean Systems, Proceedings of the International Conference on Autonomic Computing (ICAC 2005), 2pgs., Seattle, WA, June 2005 (short paper) (17% Acceptance Rate).
- C47. Douglas C. Schmidt, Jesse Spencer-Smith, Quchen Fu, and Jules White, Cataloging Prompt Patterns to Enhance the Discipline of Prompt Engineering, International Conference on Reliable Software Technologies (AEiC 2023) 13-16 June 2023, Lisbon, Portugal
- C48. *Henry Gilbert, Jules White, Matthew Berger, Generating Synthetic Returns Conditioned Off Macro Economic Features with Variational Autoencoders, International Conference on Intelligent Systems and New Applications, March 17-19, 2023, Liverpool UK
- C49. *Sam Hays, Jules White, Using Contracts to Improve Security through Responsibility Bifurcation, European Symposium on Software Engineering, Rome, Italy, Oct. 27-29, 2022
- C50. *Sam Hays, *Michael Sandborn, Jules White, WiP: DNSauth - When Step Up Authentication is Not Enough, Hot Topics in the Science of Security Symposium, April 4-8, 2022, Virtual
- C51. *Henry Gilbert, Jules White, Douglas C. Schmidt, International Conference on Sports Sciences Research and Technology Support, Valletta, Malta, Oct. 27-28, 2022
- C52. *Zhongwei Teng, *Quchen Fu, Jules White, Maria Powell, Douglas C. Schmidt, SA-SASV: An End-to-End Spoof-Aggregated Spoofing-Aware Speaker Verification System, Interspeech, September 18-22, 2022, Incheon, Korea
- C53. *Althea Henslee, Haley Dozier, Ashley Abraham, Andrew Strelzoff, Alexandre Ligo, Jules White, International Conference on Data Science, July 25-28, 2022, Las Vegas, NV
- C54. *Michael Sandborn, *Carlos Olea, *Sam Hays, Jules White, An Architecture for Component Authentication Using Secure Cyber-physical Information and Blockchain, International Symposium on Future Cyber Security Technologies, Dec 6-9, 2021, Gandia, Spain
- C55. *Zhongwei Teng, **Jacob Tate, **William Nock, *Carlos Olea, Jules White, Checklist Usage in Secure Software Development, 10th International Conference on Software Engineering and Applications, December 23-24, 2021, Sydney, Australia
- C56. *Michael Sandborn, **Clayton Wright, Jules White, Towards Cyber-physical Authentication of Additively Manufactured Components, Smart Cyber-Physical Systems Symposium (SCPS 2021), November 1-4, 2021, Online
- C57. *Xiaoxing Qiu, Jules White, Douglas C. Schmidt, A Study of Machine Learning Models for Personalized Heart Rate Forecasting in Mountain Biking, 9th International Conference on Sport Sciences Research and Technology Support, October 28-29, 2021, Valletta, Malta
- C58. *Carlos Olea, Gus Omer, John Carter, Jules White, Deep Learning Action Recognition for Basketball Shot Type Identification, 9th International Conference on Sport Sciences Research and Technology Support, October 28-29, 2021, Valletta, Malta (** Received the Best Paper Award **)
- C59. *Alex Cheng, Jules White, Using Wayfinding Data to Understand Patient Travel Within a Medical Center, American Medical Informatics Association Symposium, November 3-7, 2018, San Francisco, CA
- C60. *Zhongwei Teng, Peng Zhang, *Xiao Li, **William Nock, Marcelino Rodriguez-Cancio, Jules White, Douglas C. Schmidt, Nesbitt, Jonathan C. Denis Michael, Authentication and Usability

- in mHealth Apps, IEEE HealthComm, 17-20 September, 2018, Ostrava, Czech Republic (** Received an Outstanding Paper Award **)
- C61. *Alex Cheng, Jules White, Automated Diagnosis of Clinic Workflows, IEEE HealthComm, 17-20 September, 2018, Ostrava, Czech Republic
- C62. *Peng Zhang, Jules White, Douglas C. Schmidt, Tom Dennis, Discussions of a Preliminary Hand Hygiene Compliance Monitoring Application-as-a-Service, 10th International Conference on Health Informatics, Porto Portugal, February 21-23, 2017
- C63. *Fangzhou Sun, *Chinmaya Samal, Jules White, Abhishek Dubey, Unsupervised Mechanisms for Optimizing On-Time Performance of Fixed Schedule Transit Vehicles, Inter-national Conference on Smart Computing, May 29-31, 2017, Hong Kong, China (37% Acceptance Rate)
- C64. *Peng Zhang, Douglas C. Schmidt, Jules White, Gunther Lenz, and Mike Walker, Metrics for Accessing Blockchain-based Healthcare Decentralized Apps, IEEE Healthcomm, October, 12-15, 2017, Dalian China
- C65. *Fangzhou Sun, Yao Pan, Abhishek Dubey, Jules White, Real-time and Predictive Analytics for Smart Public Transportation Decision Support Systems, IEEE SmartComp, St. Louis, MO, May 18-20, 2016 (34% Acceptance Rate)
- C66. Yu Sun, *Hyojoon Bae, Sukanya Manna, Jules White and Mani Golparvar-Fard, Bridging Semantics with Physical Objects using Augmented Reality, IEEE International Conference on Semantic Computing, Anaheim, CA, February 7-9, 2015
- C67. Jules White, Chris Gill, Douglas C. Schmidt, Elastic Software Infrastructure to Support Computing Clouds for Cyber-Physical Systems, IEEE Symposium On Object/Component/Service-Oriented Real-Time Distributed Computing, Reno, Nevada, June 10-14, 2014
- C68. *Thaddeus Czauski, *Hamilton Turner, Jules White, and Sean Eade, NERD - No Effort Rapid Development - A Framework for Deploying Mobile Cloud Industrial Control Applications, IEEE International Conference on Mobile Cloud Computing, Services, and Engineering, Oxford, UK, April 8-11, 2014 (24.3% acceptance rate)
- C69. *Hamilton Turner, *L. Justin Stiltner, *Sumedha Mohan, Kevin Kochersberger, and Jules White, An Experimentation Framework for Smartphone-based UAV Tracking and Control, AIAA Infotech@Aerospace 2013 Conference- Unmanned Systems Applications, Boston, MA, August 19-22, 2013
- C70. *Thaddeus Czauski, *Paul Miranda, and Jules White, Utilizing Cyber-Physical Systems to Rapidly Access and Guard Patient Records, International Conference on Indoor Positioning and Indoor Navigation (IPIN), Montbeliard-Belfort, France, October 28-31, 2013
- C71. Bjorn Andersson, Sagar Chaki, Dionisio de Niz, Brian Dougherty, Russell Kegley, Jules White, Non-Preemptive Scheduling with History-Dependent Execution Time, Euromicro Conference on Real-time Systems, Pisa, Italy, July 10-13, 2012
- C72. *Hamilton Turner, Jules White, Cyber-security and Data Collection Approaches for Smartphone Sensor Systems, Conference on Ground/Air Multisensor Interoperability, Integration, and Networking for Persistent ISR III, Baltimore, MD, April 23-27, 2012
- C73. *Paul Miranda, *Nikita Sharakhov, Jules White, Mani Golparvar-Fard, Brian Dougherty, Hybrid 4-Dimensional Augmented Reality, International Conference on Pervasive and Embedded Computing and Communications, Rome, Italy, February 24-46, 2012
- C74. **Zach Rattner, *Hamilton Turner, *Daniel Guymon, Brian Dougherty, Jules White, An Energy Synchronization Method for Distributed File Synchronization Algorithms on Mobile

- Devices, International Conference on Pervasive and Embedded Computing and Communications, Rome, Italy, February 24-46, 2012
- C75. *Brian Dougherty, *Jules White, Russell Kegley, Jonathan Preston, Douglas C. Schmidt, and Aniruddha Gokhale, Optimizing DRE System Performance with the SMACK Cache Efficiency Metric, 1st International Symposium on Secure Virtual Infrastructures (DOA-SVI'11), Crete, Greece, October 17-19, 2011
- C76. *Danny Guymon, Jules White, Brian Dougherty, Mani Golparvar-Fard, Power-efficient Cyber-physical Late Arrival Detection with Smartphones, IEEE International Conference on Cyber, Physical, and Social Computing, Dalian, China, October 19-22, 2011
- C77. *Hamilton Turner and Jules White, Verification and Validation of Smartphone Sensor Networks, International ICST Conference on MOBILE Wireless MiddleWARE, Operating Systems, and Applications, London, UK, June 22-24, 2011
- C78. *Anushi Shah, Jules White, Aniruddha Gokhale, Maximizing Service Uptime of Smartphone-based Distributed Real-time and Embedded Systems, IEEE International Symposium on Object/Component/Service-oriented Real-time Distributed Computing, Newport Beach, CA, March 28-31, 2011
- C79. **Chris Thompson, Jules White, *Brian Dougherty, **Adam Albright, and Douglas C. Schmidt, Using Smartphones and Wireless Mobile Networks to Detect Car Accidents and Provide Situational Awareness to Emergency Responders, Third International ICST Conference on MOBILE Wireless MiddleWARE, Operating Systems, and Applications, Chicago, IL, June 30-July 2, 2010 (one of four papers selected for publication in a special journal issue)
- C80. *Matthias Farwick, *Berthold Agreiter, Jules White, Simon Forster, Norbert Lanza and Ruth Breu, A Web-Based Collaborative Metamodeling Environment with Secure Remote Model Access, Proceedings of the 10th International Conference on Web Engineering, Vienna, Austria, July 5-9, 2010
- C81. **J. Benjamin Gotow, **Krzysztof Zienkiewicz, Jules White, and Douglas C. Schmidt, Addressing Challenges in Delivering Augmented Reality Applications to Smartphones, Third International ICST Conference on MOBILE Wireless MiddleWARE, Operating Systems, and Applications, Chicago, IL, June 30-July 2, 2010
- C82. *Brian Dougherty, Jules White, **Chris Thompson, and Douglas C. Schmidt, Automating Hardware and Software Evolution Analysis, 16th Annual IEEE International Conference and Workshop on the Engineering of Computer Based Systems (ECBS), San Francisco, CA, April 13-16, 2009
- C83. Jules White and Douglas C. Schmidt, Model-Driven Product-Line Architectures for Mobile Devices, Proceedings of the 17th Annual Conference of the International Federation of Automatic Control, 6pgs., Seoul, Korea, July 6-11, 2008
- C84. Jules White and Douglas C. Schmidt, Automated Configuration of Component-based Distributed Real-time and Embedded Systems from Feature Models, Proceedings of the 17th Annual Conference of the International Federation of Automatic Control, 6pgs., Seoul, Korea, July 6-11, 2008
- C85. Jules White and Douglas C. Schmidt, Reducing Enterprise Product Line Architecture Deployment Costs via Model-Driven Deployment and Configuration Testing, Poster paper at the 13th Annual IEEE International Conference and Workshop on the Engineering of Computer Based Systems (ECBS '06), 2pgs., Potsdam, Germany, March 27th-30th, 2006

- C86. Jules White, Boris Kolpackov, Balachandran Natarajan, and Douglas C. Schmidt, Reducing Code Complexity With Vocabulary-Specific XML Language Bindings, Proceedings of the 43rd ACM Southeastern Conference, 7pgs., Atlanta, GA, March 2005.
- C87. Maria Powell, Marcelino Rodriguez Cancio, David Young, **William Nock, Beshoy Abdelmessih, Amy Zeller, Irvin Perez Morales, Peng Zhang, C. Gaelyn Garrett, Douglas Schmidt, Jules White, and Alexander Gelbard, Decoding Phonation with Artificial Intelligence: Proof of Concept, The 13th International Conference on Advances in Quantitative Laryngology, Voice and Speech Research, Montreal, Canada, June 2-4, 2019
- C88. *Logan Sturm, Chris Williams, Jaime Camelio, Jules White, Robert Parker, Cyber-physical Vulnerabilities in Additive Manufacturing Systems, 25th Annual Solid Freeform Fabrication Symposium, Austin, TX, August 4-6, 2014
- C89. *Hyojoon-Bae, Mani Golparvar-Fard, Jules White, Rapid Image-based Localization using Clustered 3D Point Cloud Models with Geo-Location Data for AEC/FM Mobile Augmented Reality Applications, ASCE International Conference on Computing in Civil and Building Engineering, Orlando, FL, June 23-24, 2014
- C90. *Hyo-joon Bae, Mani Golparvar-Fard, Jules White, Image-based Localization for Facility Management Mobile Augmented Reality Applications, Construction Research Congress, Atlanta, GA, May 19-21, 2014
- C91. *Hyo-Joon Bae, Mani Golparvar-Fard, Jules White, Modeling, Analyzing, and Visualizing 4D Spatio-Temporal Construction Site Information using Vision-based Mobile Augmented Reality Systems, CONVR 2013, 13th International Conference on Construction Applications of Virtual Reality, London, UK, 30-31 Oct 2013
- C92. *Hyo-Joon Bae, Mani Golparvar-Fard, Jules White, High-precision and Infrastructure-independent Mobile Augmented Reality System for Context-Aware Construction and Facility Management Applications, ASCE International Workshop on Computing in Civil Engineering, June 23-25, 2013, Los Angeles, CA (**Received the Best Paper Award**) (although titled a workshop, this is a multi-track event that would be considered a conference in CS and is the premier conference for computing in Civil Engineering)
- C93. *Hyo-Joon Bae, Mani Golparvar-Fard, Jules White, Enhanced HD4AR (Hybrid 4-Dimensional Augmented Reality) for Ubiquitous Context-Aware AEC/FM Applications, International Conference on Construction Applications of Virtual Reality, Taipei, Taiwan, November 1-2, 2012 (** Received the Best Paper Award **)
- C94. Mani Golparvar-Fard, *Paul Miranda, *Nikita Sharakhov, Jules White, Hybrid 4-Dimensional Augmented Reality Models for Ubiquitous Context-Aware Construction Management Applications, Construction Research Congress, West Lafayette, IN, May 21-23, 2012

Book Chapters

- B1. Ashraf Elnashar, Max Moundas, Douglas C. Schmidt, Jesse Spencer-Smith, Jules White, Advancing Generative AI in Software Development: Evaluating LLM-Generated Code Against Top Human Solutions, the Communications in Computer and Information Science book series, Springer, 2025
- B2. Jules White, Sean Hays, Qiyang Fu, John Spencer-Smith, Douglas C. Schmidt. "ChatGPT Prompt Patterns for Improving Code Quality, Refactoring, Requirements Elicitation, and Software Design." Generative AI for Effective Software Development, 2024, 71–108.

- B3. Michael Sandborn, Carlos Olea, Anwar Said, Mudassir Shabir, Peter Volgyesi, Xenofon Koutsoukos, Jules White, Towards AI-Augmented Design Space Exploration Pipelines for UAVs, Book series: Intelligent Computing. Artificial Intelligence (Machine Learning, Convolutional Networks, and Large Language Models. Edited by Leonidas Deligiannidis, George Dimitoglou, Hamid Arabnia, and Ahmad Tafti. Publisher: De Gruyter ISBN: 978-3-11-134400-3
- B4. Peng Zhang, Douglas C. Schmidt, Jules White, and Abhishek Dubey, Consensus Mechanisms and Information Security Technologies, Advances in Computers, vol. 115, 28pgs., Oreilly, 2019
- B5. Peng Zhang, Douglas C. Schmidt, Jules White, and Gunther Lenz, Blockchain Technology Use Cases in Healthcare, Blockchain Technology: Platforms, Tools, and Use Cases, edited by Ganesh Deka, 2018
- B6. *Michael Walker, Douglas C. Schmidt, and Jules White, "An Elastic Platform for Largescale Assessment of Software Assignments for MOOCs (EPLASAM)," User-Centered Design Strategies for Massive Open Online Courses (MOOCs), edited by Ricardo Mendoza-Gonzalez, IGI Global, 2016.
- B7. **Chris Thompson, Jules White, and Douglas C. Schmidt, Analyzing Mobile Software Power Consumption via Model-driven Engineering, Progressions and Innovations in Model-Driven Software Engineering edited by Vicente García Díaz, Juan Manuel Cueva Lovelle, Begoña Cristina Pelayo García-Bustelo and Oscar Sanjuan Martinez, IGI Global, Hershey, PA, USA 2013
- B8. *Hamilton Turner, Jules White, Jeff Reed, Adam Porter, Madhav Marathe, Anil Vullikanti, Aniruddha Gokhale. Building a Cloud-based Mobile Application Testbed. In Software Testing in the Cloud- Perspectives on an Emerging Discipline edited by Scott Tilley. IGI Global 2012
- B9. *Yu Sun, Jeff Gray, Gerti Kappel, Philip Langer, Manuel Wimmer, and Jules White, A WYSIWYG Approach to Support Layout Configuration in Model Evolution, Emerging Technologies for the Evolution and Maintenance of Software Models, edited by Jorg Rech and Christian Bunse, IGI Global, Hershey, PA, USA 2012
- B10. *Brian Dougherty, Jules White, Douglas C. Schmidt, MDA-based Configuration of Distributed Real-time and Embedded Systems, Model-driven Analysis and Software Development- Architectures and Functions, edited by Janis Osis and Erika Asnina, IGI Global, Hershey, PA, USA 2011
- B11. *Yu Sun, Jules White, Jeff Gray, Aniruddha Gokhale, Douglas C. Schmidt, Model-Driven Automated Error Recovery in Cloud Computing, Model-driven Analysis and Software Development- Architectures and Functions, edited by Janis Osis and Erika Asnina, IGI Global, Hershey, PA, USA 2011.
- B12. Jules White, *Brian Dougherty, Model-driven Testing and Analysis of Product-line Architectures, Model-driven Analysis and Software Development- Architectures and Functions, edited by Janis Osis and Erika Asnina, IGI Global, Hershey, PA, USA 2011
- B13. Jules White, *Brian Dougherty, **Harrison Strowd, and Douglas C. Schmidt, Using Filtered Cartesian Flattening and Microbooting to Build Enterprise Applications with Self-adaptive Healing, Software Engineering for Self-Adaptive Systems, edited by Betty H. C. Cheng, Rogerio de Lemos, Holger Giese, Paola Inverardi, and Jeff Magee, Springer, Berlin, Germany, pp. 241-260, 2009

- B14. Jules White, Douglas C. Schmidt, Andrey Nechypurenko, and Egon Wuchner, Reducing the Complexity of Modeling Large Software Systems, Software Applications- Concepts, Methodologies, Tools, and Applications, edited by Pierre F. Tiako, IGI Global, Hershey, PA, USA, 2009 (originally published in Designing Software-Intensive Systems Methods and Principles)
- B15. Jules White, Andrey Nechypurenko, Egon Wuchner, and Douglas Schmidt, Reducing the Complexity of Designing and Optimizing Large-scale Systems by Integrating Constraint Solvers with Graphical Modeling Tools, Designing Software-Intensive Systems- Methods and Principles, edited by Pierre F. Tiako, IGI Global, Hershey, PA, USA, 2008
- B16. *Hamilton Turner, Jules White, **Chris Thompson, **Krzysztof Zienkiewicz, **Scott Campbell, Douglas C. Schmidt, Building Mobile Sensor Networks Using Smartphones and Web Services- Ramifications and Development Challenges, Handbook of Research on Mobility and Computing- Evolving Technologies and Ubiquitous Impacts, edited by Maria Manuela Cruz-Cunha and Fernando Moreira, IGI Global, Hershey, PA, USA 2009

Workshop Publications

- W1. *Violetta Vylegzhanina, Douglas C. Schmidt, and Jules White, Gaps and Future Directions in Mobile Security Research, Third International Workshop on Mobile Development Lifecycle, Pittsburgh, PA, October 26th, 2015.
- W2. *Hamilton Turner, Jules White, Jeff Gray, Engineering Challenges of Deploying Crowd-based Data Collection Tasks to End-User Controlled Smartphones, International Workshop on Emerging Mobile Sensing Technologies, Systems, and Applications, June 12, 2011, San Francisco, CA
- W3. *Yu Sun, *Hyun Cho, Jeff Gray, Jules White, Key Challenges for Modeling Language Creation by Demonstration, FlexiTools Workshop at the International Conference on Software Engineering, May 22, 2011, Honolulu, Hawaii
- W4. *Yu Sun, *Hyun Cho, Jeff Gray, Jules White, Supporting Feature Model Configuration using a Demonstration-based Approach, International Workshop on Product Line Approaches in Software Engineering, May 22-23, Honolulu, Hawaii
- W5. *Yu Sun, Jeff Gray, Philip Langer, Manuel Wimmer, Jules White, A WYSIWYG Approach for Configuring Model Layout using Model Transformations, International Workshop on Domain-specific Modeling, Reno, Nevada, October 17-18, 2010
- W6. *Yu Sun, Jeff Gray, Jules White, MT-Scribe- A Flexible Tool to Support Model Evolution, FlexiTools Workshop at SPLASH, Reno, Nevada, October 17, 2010
- W7. *Hyun Cho, Jeff Gray, Jules White, Ontology Support for Abstraction Layer Modularization, ACoM 2010, JeJu Island, South Korea, September 14, 2010
- W8. Jules White, Douglas C. Schmidt, R&D Challenges and Emerging Solutions for Multicore Deployment/Configuration Optimization, Future of Software Engineering Research Workshop at the International Symposium on the Foundations of Software Engineering, Santa Fe, New Mexico, November 7-11, 2010
- W9. **Chris Thompson, Jules White, *Brian Dougherty, and Douglas C. Schmidt, Optimizing Mobile Application Performance with Model-Driven Engineering, IFIP Workshop on

Software Technologies for Future Embedded and Ubiquitous Systems, Newport Beach, CA, November 16-18, 2009

- W10. Jules White, Douglas C. Schmidt, Filtered Cartesian Flattening: An Approximation Technique for Optimally Selecting Features while Adhering to Resource Constraints, International Workshop on Analyses of Software Product Lines at the 12th International Software Product Line Conference, Limerick, Ireland, September 12, 2008
- W11. *James Hill, Jules White, Sean Eade, and Douglas C. Schmidt, Towards a Solution for Synchronizing Disparate Models of Ultra-Large-Scale Systems, Proceedings of the 2nd International Workshop on Ultra-Large-Scale Software-Intensive Systems at the 30th IEEE/ACM International Conference on Software Engineering, Leipzig, Germany, May 10-11, 2008
- W12. Jules White, Douglas C. Schmidt, **Sean Mulligan, The Generic Eclipse Modeling System, Model-Driven Development Tool Implementer's Forum at the 45th International Conference on Objects, Models, Components and Patterns, Zurich Switzerland, June, 2007
- W13. Andrey Nechypurenko, Jules White, Egon Wuchner, and Douglas C. Schmidt, Applying Model Intelligence Frameworks for Deployment Problem in Real-time and Embedded Systems, Proceedings of the MARTES Workshop- Modeling and Analysis of Real-Time and Embedded Systems at the 9th International Conference on Model Driven Engineering Languages and Systems, Genoa, Italy, October 2006.
- W14. Jules White, Andrey Nechypurenko, Egon Wuchner, and Douglas C. Schmidt, Intelligence Frameworks for Assisting Modelers in Combinatorically Challenging Domains, Proceedings of the Workshop on Generative Programming and Component Engineering for QoS Provisioning in Distributed Systems, Portland, Oregon, October 23, 2006
- W15. Jules White and Douglas Schmidt, Simplifying the Development of Product-line Customization Tools via Model Driven Development, Workshop on MDD for Software Product-lines- Fact or Fiction? at the 8th International Conference on Model Driven Engineering Languages and Systems, Montego Bay, Jamaica, October 2, 2005

Preprints

1. <https://arxiv.org/abs/2408.01768>
2. <https://arxiv.org/abs/2406.06608>
3. <https://arxiv.org/abs/2403.01626>
4. <https://arxiv.org/abs/2403.01271>
5. <https://arxiv.org/abs/2302.11382>
6. <https://arxiv.org/abs/2302.07845>
7. <https://arxiv.org/abs/2206.10034>
8. <https://arxiv.org/abs/2203.06517>
9. <https://arxiv.org/abs/2109.02774>
10. <https://arxiv.org/abs/2109.02773>
11. <https://arxiv.org/abs/2103.02523>
12. <https://arxiv.org/abs/2010.01172>
13. <https://arxiv.org/abs/1807.03227>
14. <https://arxiv.org/abs/1706.03700>

15. <https://arxiv.org/abs/2408.01768>
16. <https://arxiv.org/abs/2406.06608>
17. <https://arxiv.org/abs/2403.01626>
18. <https://arxiv.org/abs/2403.01271>
19. <https://arxiv.org/abs/2401.11599>
20. <https://arxiv.org/abs/2304.12512>
21. <https://arxiv.org/abs/1802.00002>

Coursera Courses

<https://www.coursera.org/instructor/juleswhite>

Magazine Articles

1. Jacob Mchangama and Jules White. "The Future of Censorship Is AI-Generated." *Time*, February 26, 2024.
2. Alejo Czerwonko and Jules White. "Life after the hype: How AI is transforming industries and economies." *World Economic Forum*, December 1, 2023
3. Jules White, Douglas C. Schmidt, Why Don't Big Companies Keep Their Computer Systems Up to Date?, *The Conversation*, September 27, 2017
4. Jules White, Douglas C. Schmidt, Andrey Nechypurenko, and Egon Wuchner, Introduction to the Generic Eclipse Modeling System, *Eclipse Magazine*, Volume 06, January, 2007
5. Egon Wuchner, Andrey Nechypurenko, Jules White, Douglas C. Schmidt, Das "Generic Eclipse Modeling System" (GEMS)- skalierbare Domanenmodellierung leicht(er) gemacht, *ObjectSpektrum*, June, 2007

Poster Publications

1. *Thaddeus Czauski, *Paul Miranda, and Jules White. Utilizing Cyber-physical Systems to Rapidly Access and Guard Patient Records, presented at the 8th Via Research Recognition Day, Blacksburg, VA, 2013. (Honorable mention- 4th place clinical research student poster competition)
2. *Thaddeus Czauski, *Paul Miranda, Jules White, Utilizing Cyber-physical Systems to Rapidly Access and Guard Patient Records, International Conference on Indoor Positioning and Indoor Navigation, Montpellier, France, October 28-31, 2013
3. Jules White, Douglas C. Schmidt, "Simplifying the Development of Product-Line Customization Tools via the Generic Eclipse Modeling System," OOPSLA, eclipse Technology eXchange (eTX), Oct 16-20, 2005, San Diego, California

Demos

1. *Yu Sun, Jeff Gray, Jules White, MT-Scribe- A Tool for Recording and Inferring Model Transformations, Tool Demo, OOPSLA 2010

2. *Yu Sun, Jeff Gray, and Jules White, "MT-Scribe- An End-User Approach to Automate Software Model Evolution," Tool Demonstration, International Conference on Software Engineering (ICSE), Honolulu, HI, May 2011.

Granted Patents

1. Systems and methods for restricting access to network resources via in-location access point protocol, Number: 9,363,670, Utility Patent, 2016
2. Systems And Methods To Synchronize Data To A Mobile Device Based On A Device Usage Context, Number: 9578445, Utility Patent, 2017
3. Systems And Methods For Enforcing Access Control Policies On Privileged Accesses For Mobile Devices, 9787681, Utility Patent, 2017
4. Systems And Methods For Enforcing Security In Mobile Computing, 9773107, Utility Patent, 2017
5. Systems And Methods For Enforcing Security In Mobile Computing, 9712530, Utility Patent, 2017
6. Systems And Methods To Enforce Security Policies On The Loading, Linking, And Execution Of Native Code By Mobile Applications Running Inside Of Virtual Machines, 9609020, Utility Patent, 2017
7. Anti-distracted driving systems and methods, 10674005, Utility Patent, 2020

Patent Applications

8. Real-time Robust Tampering Detection of Products Using Piezoelectric Containers, Publication Number: 20230053576, Application, Filed August 17, 2022
9. Anti-distracted driving systems and methods, Publication Number: 20190289126, Filed April 29, 2019
10. Anti-distracted driving systems and methods, Publication Number: 20200296205, Filed April 24, 2020
11. Systems And Methods For Securing The Boot Process Of A Device Using Credentials Stored On An Authentication Token, Application Number: 20140282992, Filed March 13, 2014
12. Systems And Methods To Secure Short-Range Proximity Signals, Application Number: 20140273857, Filed: March 13, 2014
13. Systems And Methods For Securing And Locating Computing Devices, Application Number: 20140283136, Filed: March 13, 2014
14. Systems And Methods For Enhancing Mobile Device Security With A Processor Trusted Zone, 13/922,673, 2014 (Utility Application)
15. Systems And Methods To Synchronize Data To A Mobile Device Based On A Device Usage Context, 61,780,408, 2014 (Provisional Patent)
16. Systems And Methods For Securing The Boot Process Of A Device Using Credentials Stored On An Authentication Token 61/779,931, 2014 (Provisional Patent)
17. Systems And Methods For Securing And Locating Computing Devices 61/785,109, 2014 (Provisional Patent)

18. Systems And Methods To Secure Short-Range Proximity Signals 61/781,252, 2013 (Provisional Patent)
19. Mobile Security Via Aspect Oriented Programming, 61/675,927, 2013 (Provisional Patent)
20. Systems And Methods For Image-Based Searching, 61/680,843, 2012 (Utility Application)

Grants and Contracts

Total Grant Support (excluding MOOC Revenue): > \$17M
 Total Grant Support as Lead PI: > \$2M

1. AFRL, Cloud-based IoT Acceptance Test Methodologies, \$35,000, 2/1/23-8/1/23, Co-PI, PI D. Schmidt
2. NSF, CIVIC-PG Track B: Creating an AI-based Community-wide Efficient and Equitable Response System, \$50,000, 9/28/22-3/1/23, Co-PI, PI M. Ma
3. DARPA, Design.R - AI-assisted CPS Design, \$8,696,785, 9/24/2020-9/23/2024, Co-PI, P. Volgeyes, PI, A. Ledeczi, Co-PI, J. Stzipanovits, Co-PI, X. Koutsoukos, Co-PI
4. NSF, Creating an AI-based Community-wide Efficient and Equitable Response System, \$50,000, 9/1/2022-4/1/2023, Co-PI, M. Ma, PI, G. Porumbescu, Co-PI, A. Mukhopadhyay, Co-PI
5. NSF, CPS: TTP Option: Medium: Collaborative Research: Cyber-Physical System Integrity and Security with Impedance Signatures, \$487,184, 10/1/2019-9/30/2022, PI
6. NSF, CPS: TTP Option: Medium: Collaborative Research: Cyber-Physical System Integrity and Security with Impedance Signatures: REU Supplemental Funding Request, \$16,000, 3/10/2020-9/30/2022, PI
7. NSF, CAREER: At-scale Analysis of Issues in Cyber-security and Software Engineering: REU Supplemental Funding Request, \$16,000, 3/1/18-4/30/2022, PI
8. AFRL (through subcontract with Securboracion), Digital Thread Modeling Environment, \$250,000, 8/20/19-8/20/21, Co-PI, D.C. Schmidt, PI
9. NOAH Basketball, "Benchmarking Computer Vision Algorithms for Basketball," \$65,000, 7/1/29-6/30/2020, PI
10. NSF, "Development and Validation of a Mobile, Web-based Coaching Tool to Improve Pre-K Classroom Practices to Enhance Learning," \$2,685,061, 7/1/18-6/30/22, Co-PI, C. Christopher, PI, D.C. Schmidt, Co-PI
11. NSF, "I-Corps – Leaf Global Fintech: Virtual Banking Beyond Borders," \$50,000, 12/1/18-5/31/19, PI
12. Solaster, "Blockchains Data Exchange via FHIR," \$30,000, 9/1/18-8/31/19, PI
13. Securboracion, "Virtualize Combat System Environment (ViCE) Phase," \$15,000, 1/1/18-3/26/18, Co-PI, D.C. Schmidt, PI
14. NSF, "CPS: Synergy: Collaborative Research: Cyber-physical Approaches to Advanced Manufacturing Security: REU Supplemental Funding Request," \$16,000, 5/10/2018-5/31/2019, PI
15. NSF CPS: Synergy: Collaborative Research: Cyber-physical Approaches to Advanced Manufacturing Security: REU Supplemental Funding Request, \$16,000, PI

16. **NSF, CAREER:** At-scale Analysis of Issues in Cyber-security and Software Engineering, CNS-1552836, \$487,243, 5/15/16-4/30/22, J. White, PI
17. AFRL, Container Hopping at Random Intervals, \$35,000, 7/19/16-1/17/17, J. White, PI
18. Vanderbilt TIPS, Advancing Data-Driven mHealth Technologies for Long-term Health and Health Behavior Change, \$200,000, J. White, Co-PI, T. Rosenbloom, PI, D.C. Schmidt, Co-PI, H. Silver, Co-PI
19. DARPA (through subcontract with BBN Technologies/Raytheon), "IMMortals," \$1,235,567 12/1/15-11/23/19, J. White, Co-PI, D.C. Schmidt, PI
20. Coursera, "Android App Development," \$50,000, Co-PI, 1/1/16-5/31/16, J. White, Co-PI
21. Varian - Industrial Internet Architect, Varian Medical Systems, Inc., \$213,810, 10/1/14-7/1/17, D.C. Schmidt, PI, J. White, Co-PI, D.C. Schmidt, PI
22. NSF, CPS-EAGER- Experiments with Smart City Hubs: Integration Platform for Human Cyber-Physical Systems In Smart Cities, \$197,556, Co-PI, 6/15/15-5/31/17, J. White, Co-PI, A. Dubey, PI
23. Vanderbilt, Rapid Hypothesis Testing on Traditional and Nontraditional Data Sources for Clinical Decision Support, \$78,580, PI, 5/22/15-6/30/17, J. White, PI, D.C. Schmidt, Co-PI
24. CPS: Synergy: Collaborative Research: Bad Parts: Cyber-physical Approaches to Advanced Manufacturing Security, NSF / DHS, \$246,861.83, 3/16/15-3/15/18 PI, J. White, PI
25. Hybrid 4-Dimensional Augmented Reality-Environments for Ubiquitous Markerless Context-Awareness Architecture/Engineering/Construction Professionals, NSF, \$299,967, 8/10/12-7/31/15, J. White, PI, M. Golparvar-fard, PI@UIUC (\$111,582 transferred to Vanderbilt)
26. Progressive Model Generation for Adaptive Resilient System Software, NAVY STTR-ONR Securobation, \$49,406, 8/6/13-1/31/14, D.C. Schmidt, PI, J. White, Faculty
27. The Robust Software Modeling Tool (RSMT) - Phase II, ONR , \$749,904.00, 6/15/14-6/14/17, D. Schmidt, PI, J. White, Co-PI
28. Automatically Devising Privacy Controls for Online Social Networks Using Contextual Information, L3, \$30,000, 4/1/13 to 3/31/14, J. White, PI, C. Clancy, Co-PI
29. Machine Learning and Metaheuristic Optimization of Cloud Computing, L3, \$30,000, 4/1/13-3/31/14, J. White, PI, C. Clancy, Co-PI
30. Hawksnest, NSA, \$204,975, 1/1/13 to 7/1/13, J. Reed, PI, J. White, Co-PI, C. Dietrich, Co-PI
31. Cyber-physical Systems Security, VT, \$20,289, 1/1/13-12/31/14, J. White, PI, J. Reed, Co-PI
32. CSR- Workshop- Computing Clouds for Cyber Physical Systems (CC-4-CPS), NSF, \$73,738, 3/13/13 to 3/14/13, D.C. Schmidt, PI, J. White, Co-PI, C. Gill, Co-PI
33. Android / Arduino Attack Surface Analysis, ARO, \$64,884, 8/15/12-8/14/13, J. White, PI, J. Reed, Co-PI
34. C2ORES, AFRL, \$300,000, 8/15/12-8/14/13, D.C. Schmidt, PI, J. White, Co-PI, J. Hill Co-PI, A. Gokhale, Co-PI
35. Dynamically Managed Mobile Security, VT-ARC, 8/10/11-12/31/11, \$100,000, J. White, PI
36. Cross-platform Data-Intensive Smartphone Applications, Siemens, 10/1/11-9/30/2012, \$99,937, J. White, PI
37. Enhanced Reality for Military Applications, Institute for Critical Technologies and Applied Science, 9/1/2011-8/31/2012, \$40,000, J. Reed, PI, J. White, Co-PI

38. The Android Tactical Application Analysis and Knowledge Cloud, ARO, 6/15/2011-6/14/2012, \$250,000, J. White, PI, J. Reed, Co-PI, S. Hasan, Co-PI, A. Porter, Co-PI, A. Gokhale, Co-PI, T. Bapty, Co-PI
39. RAPID- Collaborative Research- Cloud Environmental Analysis and Relief, NSF, 8/14/10-8/14/12, \$65,201, J. White, PI
40. Predictive Cache Modeling and Analysis, AFRL, (subcontract through Lockheed Martin Aeronautics), 4/8/10-10/8/2011, \$230,000, J. White, PI, D.C. Schmidt, Co-PI
41. Automated Deployment and Configuration of Distributed Real-time and Embedded System Software Using Heuristic Search Techniques, NSF, 9/1/09-9/1/12, \$472,000, A. Gokhale, PI, J. White, Co-PI
42. Vanderbilt IDEAS, \$200,000, Y. Cui, PI, A. Gokhale, Co-PI, K. Pence, Co-PI, D. Schmidt, Co-PI, and J. White, Co-PI
43. Early Integration and Performance Testing of Heterogeneous Computing Environments, Australian DoD, 1/1/09-7/1/09, \$180,000, D.C. Schmidt, PI, J. White, Co-PI, J. Hill, Co-PI, and A. Gokhale, Co-PI
44. Visual Software- Reducing the Complexity of Student Software Development through Model-Driven Development, Teaching as Research (TAR) Award, Vanderbilt Center for Teaching, 9/1/08-12/28/08, \$3,000, Fall, 2008, J. White, PI

Research Commercialization & Faculty Entrepreneurship

1. Co-founder & Chief Scientist, Optio Labs, ~\$12.5M in venture funding, sells mobile security products for classified mobile devices
2. Co-founder & Chief Scientist, PAR Works, \$1M Seed Round from Allied Minds Inc., sold advanced mobile/cloud computer vision products for retail
3. Co-founder of Ziiio, Inc., sells indoor positioning solutions with customers, such as Ascension (131 hospitals), HCA, and Vanderbilt University Medical Center.

Entrepreneurship & Commercialization Awards

1. 2013 Consumer Electronic Show (CES) Innovation Award for HD4AR (commercialized as PAR Works)
2. 2013 Technical Achievement Finalist for HD4AR at SXSW (commercialized as PAR Works MARS)
3. 2013 Accelerator Award Finalist for HD4AR at SXSW (commercialized as PAR Works MARS)

Selected Consulting

1. VIDA Inc., Spring Framework Consulting
2. 4D Technologies, Bluetooth Positioning Consulting
3. ConnectYourCare / 40AU, Spring Framework Consulting
4. CTIA – Largest Wireless Trade Group, Authored Reports on Mobile Security and Remote Locking of Devices

5. Amazon, Inc., Expert Witness for Patent Litigation
6. Apple Inc. Expert Witness & Consultant for Patent Litigation (via Bridges Mavrakkis, Wong Cabello, Kirkland & Ellis, Hoyt, Fleming & Dowler, and Morrison & Foerester), Expert Consulting for Patent Litigation
7. JP Morgan, Expert Consultant for Patent Litigation
8. IBM, Expert Consultant for Patent Litigation
9. IBM (via Desmarais LLP), Expert Consulting for Patent Litigation
10. Optio Labs, Inc., CTO/Chief Scientist
11. PAR Works/Cloudpoint, Inc., Chief Scientist
12. Ziiio, Inc., President

Professional Service

Program/Conference Chairs

1. Social Media Chair, CPS Week, 2021
2. Program Chair, 2015 International Conference on Software Product Lines
3. Program Vice-Chair, IEEE/ACM International Conference on Cyber, Physical, and Social Computing, Dalian, China, October 19-22, 2011
4. Program co-Chair, International Symposium on Secure Virtual Infrastructures, Crete, Greece, October 17-19, 2011
5. Local arrangements chair for the 2009 Distributed Event-based Systems Conference (DEBS), Nashville, TN, July 6-9
6. Publicity chair for the MoDELS 2007 conference, Nashville, TN, Oct. 1-5, 2007

Special Journal Issue Editorships

7. Chief Editor, Proceedings of the IEEE Special Issue on Applications of Augmented Reality Environments
8. Guest Editor, IEEE SW 2013 - IEEE Software Special Issue on Next Generation Mobile Computing

Conference / Workshop Organization

9. Co-organizer, CSR Workshop: Computing Clouds for Cyber Physical Systems (CC-4-CPS)
10. Co-organizer, Smartphones in the Curriculum Workshop at the 24th IEEE Conference on Software Engineering Education and Training, Waikiki, Honolulu, Hawaii, May 22, 2011
11. Co-organizer, The Object-Oriented Trivia Show at SPLASH (formerly OOPSLA) 2010, Reno, Nevada
12. Co-organizer of the Model-Driven Development Tool Implementor's Forum Workshop, TOOLS 2007, Zurich, Switzerland, June, 2007

Grant Review Panels

I have participated in grant review panels for the NSF programs for many years.

Conference Committees / Panels

13. Program committee, NSF CPS PI Meeting, 2021
14. Panelist, Big Data + Privacy in the COVID Era, Vanderbilt Webinar, 2020
15. Program committee, SPLC, 2017
16. Program committee, SPLC, 2016
17. Program committee, Modelsward 2015
18. Program committee, PECCS 2015
19. Program committee, GPSE, 2015
20. Program committee, Artificial Intelligence and Software Engineering (AISE) track again at BICT 2014
21. Program committee, IEEE/IFIP Conference on Embedded and Ubiquitous Computing, Paphos, Cyprus, October 3-5, 2012
22. Program committee, International Conference on Software Product Lines, Salvador, Brazil, September 2-12, 2012
23. Program committee, International Conference on Pervasive and Embedded Computing and Communication Systems, Rome, Italy, February 24-26, 2011
24. Judge, ACM Student Research Competition, SPLASH 2011, Portland, OR, October 24-27, 2011
25. Program committee, The 9th IEEE/IFIP International Conference on Embedded and Ubiquitous Computing, Melbourne, Australia
26. Program committee, Model-Driven Engineering, Logic and Optimization Workshop, June 6, 2011, University of Birmingham, Birmingham, UK
27. Program committee, 49th International Conference on Objects, Models, Components and Patterns, Zurich, Switzerland, June 28-30, 2011
28. Program committee, International Conference on Pervasive and Embedded Computing and Communication Systems 2011, Algarve, Portugal
29. Program committee, IEEE/ACM International Conference on Green Computing and Communications (GreenCom) 2010, Hangzhou, China
30. Program committee, IEEE International Conference on High Performance Computing and Communications (HPCC 2010), Melbourne, Australia
31. Program committee, IEEE International Workshop on Mobile Cyber-Physical Systems 2010, Xi'an, China
32. Program committee, Artificial Intelligence and Software Engineering Track, 5th International ICST Conference on Bio-Inspired Models of Network, Information, and Computing Systems (BIONETICS 2010)
33. Student research competition committee for the Systems, Programming, Languages, Architectures, and Software for Humanity (SPLASH formerly known as OOPSLA), October, 2010, Reno, Nevada.
34. Doctoral symposium panel, OOPSLA 2009, Orlando, FL, October 27, 2009
35. Program committee, European Conference on Modeling Foundations and Applications, Paris, France, June 15-18, 2010

36. Program committee, VaMos 2010, Pohang, South Korea, January 27-29, 2010
37. Reviewer, Models 2009, Denver, CO, October 4-9, 2009
38. Program committee member of the 2009 European Conference on Model Driven Architecture - Foundations and Applications (ECMDA-FA), Enschede, The Netherlands
39. Program committee member of the Models@Runtime workshop, Models 2007, Nashville, TN
40. Panel moderator at the MoDELS 2008 conference, Toulouse, France, Sept. 28-Oct. 3, 2008
41. Panels moderator for the MoDELS 2006 conference, Genoa, Italy, Oct. 2-5, 2006

Academic Service

1. Associate Dean for Strategic Learning Programs 2021-2023
2. Founding Member of LIVE
3. Director of the Online MS in Computer Science, 2019-2023
4. Advisor for over 200 second majors and minors in Computer Science, 2018-2021
5. Computer Engineering Class of 2018 advisor, 2014-2018
6. Faculty seminar at Vanderbilt University Commencement 2017
7. Member of the faculty search committee for Big Data 2015-2016
8. Mentor for the Innovation Garage Program with Accenture and the Wondr'y, 2016-2020
9. Participated in the Fall 2016 Vanderbilt Board of Trust Dinner
10. Selected to offer one of the inaugural "University Courses" for Vanderbilt in 2016
11. Gave the Vanderbilt University Family Weekend Faculty Lecture for the School of Engineering on "What Happens When the Phones and Machines Outnumber Us? How Mobile Computing, the Internet of Things, and Cyber-security Will Impact Our Lives", 2015
12. Member of the Faculty Search Committee in Computer Science, 2016
13. Developed the Vanderbilt University Medical Center "Walkways" app that is used for wayfinding across the medical center, 2014-2020
14. Directed a graduate student that developed a mobile augmented reality application that was sent out to 1,000s of Vanderbilt alumni and donors to promote the new engineering building, 2017
15. Served on the Dean's committee that produced a report on Vanderbilt research and sensor systems, 2016
16. Served on the Dean's committee that produced a report on Vanderbilt research and Big Data in the curriculum, 2016
17. Member of the Vanderbilt committee reviewing mobile applications for the university, 2014-2017
18. Participated in the Engineering Open House for prospective students, 2014
19. Invited by the CTTC and spoke on two panels at the Nashville meeting of the Association of University Technology Transfer Managers, 2014
20. Gave a talk to the Engineering School's Board of Visitors on MOOCs & possible plans for a professional MS program, 2014
13. Gave a talk to the EECS Department's Industry advisory board, 2014
14. Spoke to the CTTC's Entrepreneurship Advisory Board, 2014
15. Spoke to an undergraduate dorm, through an invitation from Doug Fisher, about mobile computing, 2014

16. Established a partnership with the Emergency Department in VUMC and led the team that is helping them to develop a secure messaging system for doctors in the ER, 2013
17. Gave a research talk to Schneider Electric as part of their visit to form a strategic partnership with the university, 2013
18. Member of the ECE Department Head search committee at Virginia Tech, 2012
19. Member of the ECE faculty search committee at Virginia Tech, 2012
20. Member of the College of Engineering Faculty Entrepreneurship Taskforce at Virginia Tech, 2011-2012
21. Member of the ECE Dept IT Committee at Virginia Tech, 2010-2013
22. Presentation to the Freshman Engineering Seminar, 2011
23. CPE Representative for Graduate Student Open House, 2011
24. Demo for VT-IDEA Group, 2011
25. Marcher in College of Engineering Commencement Ceremony, 2011

Community Service

1. Past President and Board Member for the KTK Belt Foundation, which successfully established a 260,000-acre protected area in Nepal, to safeguard snow leopards, red pandas, and blue sheep, helping link 1.3 million acres of existing high altitude habitat. In addition, while I was President of the Board, KTK-BELT created 6 biodiversity 'Learning Grounds' campuses to teach biodiversity to young people and protect many endangered species across 6 different ecoregions of Nepal. 2012-2021
2. Past Board Member for the KTK Belt Foundation
3. Mentor for LaunchTN Tech Day 2015
4. Connected Nashville Technology Standards Committee 2016
5. Developed the indoor “wayfinding” app for the Music City Center (MCC) in Nashville. As part of this effort, I was honored by the Mayor at an unveiling ceremony in the MCC that was covered by several TV stations and national press. This work also appeared on the front page of Vanderbilt.edu. 2013-2020
6. Worked closely with the Office of Innovation for the City of Nashville to connect Vanderbilt research and undergraduates to key challenges for the city. 2014-2017
7. Worked with Metro Nashville Public Schools to develop a platform for managing after school program data and coordinating with after school providers as part of my 2015 CS 279 class. 2015

Doctoral Theses Supervised

- P1. Quchen Fu (2023) — Beyond Audio Quality: Understanding and Improving Human Voice Communication with Low-Resource Deep Learning
- P2. Zhongwei Teng (2022) — Model Architectures and Algorithms for Frugal Deep Learning
- P3. Peng Zheng (2018) — Blockchain in Healthcare (Assistant Professor, Belmont University)
- P4. Fangzhou Sun (2018) — Smart Cities (Senior Research Scientist, Facebook)
- P5. Yao Pan, PhD (2017) — Gray Computing (Senior Software Engineer, LinkedIn)

- P6. Hyojoon Bae, PhD (2014)– “High Precision 4 Dimensional Augmented Reality.” (Senior Research Scientist, Apple)
- P7. Hamilton Turner, PhD (2014)– “Optimizing the Deployment and Configuration of Mobile Cloud Computing.” (CTO for multiple companies, currently CEO of own company)

Master’s Theses Supervised

- M1. Gabriela Gresenz, MS (2021) – “Automated Classification of Terrain Roughness Using Deep Learning”
- M2. Xiaoxing Qiu, MS (2021) – “Personalized & Course-specific Human Performance Prediction Using Deep Learning”
- M3. Wang Meng, MS (2015) - “iBeacon Fingerprinting with Machine Learning”
- M4. Weichen Wang, MS (2015)- “Moving Target Container Cyber-Defenses and Quality of Service”
- M5. Songtao Hei, MS (2015) - “Machine-learning Prediction of Graph Centrality for Opensource Repository Systems”
- M6. Paul Miranda, MS (2012)– “High Precision Augmented Reality Using Structure from Motion”.
- M7. Daniel Guymon, MS (2012)– “Cyber-physical Late Arrival Detection and Bluetooth P2P Security Improvements”

Current Graduate Students

- G1. Carlos Olea, Ph.D.
- G2. Michael Sandborn, Ph.D.
- G3. Henry Gilbert, Ph.D.
- G4. Althea Kelly, Ph.D.
- G5. Sam Hays, Ph.D.
- G6. Ashraf Elnashar, Ph.D.
- G7. William Schrieber, Ph.D.

Visiting International Graduate Students

- I1. Yu Yao, Ph.D., College of Information Science and Engineering, Northeastern University, P.R. China, 2019-2021
- I2. Marcelino Rodriguez, Ph.D., Inria, France, 2017-2018
- I3. Jose Galindo, Ph.D., University of Seville, 2012-2013

Doctoral Thesis Committees

1. Charles Hartsell, Ph.D. (current), committee member
2. Zihao Zhan, Ph.D. (2020), committee member
3. Himanshu Neema (2018), Ph.D. committee member
4. Asish Tapdiya (2018), Ph.D. (DBMI) committee member
5. Alex Cheng (2018), Ph.D. (DBMI) committee member
6. Kyoungho An (2015), Vanderbilt University
7. Jose Galindo (2014), University of Seville
8. Faruk Caglar (2014), Vanderbilt University
9. Alexandru Turcu (2014), Virginia Tech
10. Peng Lu (2013), Virginia Tech
11. Benjamin Shelton (2013), Virginia Tech
12. Tripti Saxena (2012), Vanderbilt University
13. Brian Dougherty (2011), Vanderbilt University
14. Yu Sun (2011), University of Alabama
15. Lisa Durbeck (2012), Virginia Tech

Post-doctoral Fellows Mentored

1. Marcelino Rodriguez (2018), CTO Couture Technologies
2. Dr. Yu Sun (2014), Associate Professor Cal State Pomona
3. Dr. Brian Dougherty (2012), Chief Operating Officer Briovation

Courses Taught

Overall Instructor Rating Average Across 29 Courses: 4.46 out of 5.0

1. CS 4279/CS5279, Software Engineering Projects, Spring 2023
2. CS 4277/5277, Cybersecurity, Fall 2022
3. CS 6387, Topics in Software Engineering / Cybersecurity, Fall 2022
4. CS 6387, Topics in Software Engineering / Cybersecurity, Spring 2022
5. CS 4277/5277, Cybersecurity, Fall 2021
6. CS 6387, Topics in Software Engineering / Cybersecurity, Fall 2021
7. CS 5278, Principles of Software Engineering, Spring 2021 (4.67 out of 5.0 overall instructor rating), 24 grad
8. CS 4279/5279, Software Engineering Projects, Spring 2021 (4.5 out of 5.0 overall instructor rating), 26 ugrad and 2 grad
9. CS 4277 / 5277 Cybersecurity, Fall 2020, 34 students (overall instructor rating of 4.61 out of 5)
10. CS 5278 Principles of Software Engineering, Fall 2020, 21 students (overall instructor rating of 4.67)
11. CS 5278, Principles of Software Engineering, Summer 2020, 5 students, (overall instructor rating of 5.0 out of 5.0)
12. CS 4279 / 5279 Software Engineering Projects, Spring 2020, 28 students (overall instructor rating of 4.5 out of 5)

13. CS 6385 Advanced Software Engineering, Spring 2020, 7 students (overall instructor rating of 4.8 out of 5)
14. CS 4279 / 5279 Software Engineering Projects, Spring 2019, 42 students (overall instructor rating of 4.64 out of 5.0)
15. CS 6387 Topics in Software Engineering, Fall 2019, 8 students (overall instructor rating of 5 out of 5)
16. CS 4277 / 5277 Cyber-security, Fall 2019, 31 students (overall instructor rating of 4.46 out of 5).
17. CS 4279 / 5279 Software Engineering Projects, Spring 2018 (overall instructor rating of 4.83 out of 5).
18. CS 4278 / 5278 Principles of Software Engineering, Fall 2018, (overall instructor rating of 3.8 out of 5).
19. CS 4279/5279, Software Engineering Projects, Spring 2017 (overall instructor rating of 4.25 out of 5, current, 22 ugrad and 2 grad)
20. UNIV 3278/5278, Tackling Big Questions with Mobile Cloud Computing, Spring 2017 (overall instructor rating of 3.6 out of 5, current, 14 ugrad and 1 grad)
21. UNIV 3278 Tackling Big Questions with Mobile Cloud Computing, Fall 2016, 11 students (overall instructor rating of 5.0 out of 5, 11 non-CS ugrad)
22. CS 4278, Principles of Software Engineering, Fall 2016, 38 students (overall instructor rating of 2.93, 35 ugrad and 3 grad)
23. CS 4279, Software Engineering Projects, Spring 2016 (overall instructor rating of 4.66 out of 5, 15 ugrad and 2 grad)
24. CS 4278, Principles of Software Engineering, Fall 2015, 38 students (overall instructor rating of 4.36, 30 ugrad and 1 grad)
25. CS 279 Software Engineering Projects, Spring, 2015 (overall instructor rating of 4.85 out of 5)
26. CS 278 Principles of Software Engineering, Fall, 2014 (overall instructor rating of 4.1 out of 5, 31 students)
27. CS 279 Software Engineering Projects, Spring, 2014 (overall instructor rating of 4.66 out of 5, 17 students)
28. CS 278, Principles of Software Engineering, Fall, 2013 (overall instructor rating of 4.3 out of 5, 15 students)
29. ECE 4564 Network Application Design, Virginia Tech, Fall, 2012 (overall instructor rating of 5.21 out of 6, 45 students)
30. ECE 4564 Network Application Design, Virginia Tech, Fall, 2011 (overall instructor rating of 5.32 out of 6, 45 students)
31. ECE 3574 Applied Software Design, Virginia Tech, Spring, 2011 (overall instructor rating of 4.89 out of 6, 37 students)
32. ECE 6504 Foundations of Mobile Cyber-physical Applications, Virginia Tech, Spring, 2011 (overall instructor rating of 4 out of 4, 10 students)
33. ECE 4564 Network Application Design, Virginia Tech, Fall, 2010 (overall instructor rating of 3.7 out of 4, 46 students)
34. EECE 261 Voice and Data Communications, Vanderbilt University, Fall, 2009 (overall instructor rating of 4.4 out of 5)

35. EECE 262 Local Area Networks and Smartphone Networking Projects, Vanderbilt University, Spring, 2010 (overall instructor rating of 4.5 out of 5)
36. CS 279 Software Engineering Projects, Vanderbilt University, Spring, 2009 (overall instructor rating of 4.8 out of 5)
37. CS 278 Principles of Software Engineering, Vanderbilt University, Fall, 2008 (overall instructor rating of 4.66 out of 5, 5 is "Excellent")

Undergraduate Research Supervised for Credit (additional non-credit supervision not listed)

1. CS 3860/3861/3850 Undergraduate Research / Independent Study, Fall, 2020 (4 students)
2. CS 3860/3861/3850 Undergraduate Research / Independent Study, Spring, 2020 (17 students)
3. CS 3860/3861/3850 Undergraduate Research / Independent Study, Fall, 2019 (16 students)
4. CS 3860/3861/3850 Undergraduate Research / Independent Study, Spring, 2019 (6 students)
5. CS 3860/3861/3850 Undergraduate Research / Independent Study, Fall, 2018 (12 students)
6. CS 3860/3861/3850 Undergraduate Research / Independent Study, Spring, 2018 (2 students)
7. CS 3860/3861/3850 Undergraduate Research / Independent Study, Fall, 2017 (14 students)
8. CS 3860/3861/3850 Undergraduate Research / Independent Study, Spring, 2016 (6 students)
9. CS 240, Undergraduate Research, Spring, 2015, (2 students)
10. CS 240, Undergraduate Research, Spring, 2014, (3 students)
11. CS 240, Undergraduate Research, Spring, 2014, (1 student)
12. ECE 4974 & 4994, Undergraduate Research / Independent Study, Spring/Fall 2012 (6 students)
13. ECE 4974 & 4994, Undergraduate Research / Independent Study, Spring/Fall 2011 (6 students)

Massively Open Online Courses (MOOCs)

1. First Coursera Trans-institutional MOOC on Mobile Cloud Computing, https://www.coursera.org/specialization/mobilecloudcomputing/2?utm_medium=listingPage
2. Pattern Oriented Software Architectures: Programming Mobile Services for Android Handheld Systems, 90,000 students, 2014, <https://www.coursera.org/course/posa>
3. Programming Cloud Services for Android Handheld Systems, 78,000 students, 2014, <https://www.coursera.org/course/mobilecloud>
4. Engineering Maintainable Android Apps, 1,200 students, 2017, <https://www.coursera.org/learn/engineeringandroidapps>

Tutorials

1. Mobile Security, Virginia Tech WiCAT Conference, 2012, Blacksburg, VA
2. Model-driven Engineering, ACM Southeast Conference 2010, Oxford, MS
3. Product-line Modeling and Automation with Eclipse, OOPSLA 2008, Nashville, TN, USA, Oct. 20, 2008
4. Product-line Modeling and Automation with Eclipse, Models 2008, Toulouse, France, Sept. 28, 2008

5. Domain-specific Modeling Languages, OOP 2008, Munich, Germany, Jan. 25, 2008
6. Model-Driven Development, MoDELS 2006 conference, Genoa, Italy, Oct. 2-5, 2006

Courses Created or Significantly Redesigned

1. **Created UNIV 3278/5278, Tackling Big Questions with Mobile Cloud Computing** - The new UNIV course and my existing CS 4278/4279 courses, now leverage an innovative format that pairs CS and non-engineering students in interdisciplinary teams. Giving students exposure to interdisciplinary software development is critical, since this is the norm of real-world software development. The unique approach has been discussed in several articles by the university (<https://my.vanderbilt.edu/universityfundingprograms/2017/01/one-on-one-with-the-faculty-behind-tackling-big-questions-with-mobile-cloud-computing-part-1-of-3>, <https://engineering.vanderbilt.edu/news/2016/schmidt-white-peers-across-vanderbilt-teach-mobile-cloud-computing-to-diverse-majors>).
2. **Redesigned CS 278, Principles of Software Engineering** – I redesigned CS 278 to have a cloud computing and mobile focus. The new material included topics on software engineering automation for dealing with large-scale testing and deployment of cloud computing applications. I also added a new focus on code reviewing and writing loosely coupled, extensible applications.
3. **Redesigned CS 279, Software Engineering Projects** – This course had not been taught in previous years and I significantly revamped it to increase student involvement with real-world software engineering challenges. I reached out to the city of Nashville and established a deep collaboration with the Office of Innovation. Projects for the course have been sourced from the Music City Center, Metro Nashville Public Schools, and the Dept. of Public Works. Two of the teams from the 2014 course entered the Multi-City Innovation Challenge. One team tied for 1st (against entrepreneurs and not students!) and the other team was in the top 10.
4. **Redesigned ECE 4564 Network Application Design** – I redesigned the Virginia Tech Network Application Design course to focus on mobile cloud computing. A particular emphasis was placed on undergraduate research in the course. Undergraduates from the course went on to win awards, such as being a Computer Research Association Undergraduate Researcher of the Year Award and author first-author conference publications.
5. **Created the Coursera MOOC, Building Sustainable Android Apps** – This MOOC course introduces students to the software engineering principles needed to test and evolve applications over time. The course has had 15,000 visitors since its launch two weeks ago and currently has ~500 active students engaged.
6. **Created the Coursera MOOC, Programming Cloud Services for Android Handheld Systems** – This MOOC course challenged me to create the highest quality educational materials for the 78,000 students in the course. I developed a low-cost technique for building a “lightboard” and used it for teaching my MOOCs. An example of the technique, which costs ~\$150 to implement, is available at www.youtube.com/playlist?list=PLyUlnGzGzkzsXHItNSx_KPyC62hsrAgrK. I used this technique to create 12 hours of innovative lecture content that would not be possible without

using costly video production effects. I also developed an automatic grading system for complex Java assignments that was used to grade roughly 7,000 programming assignments. This infrastructure provided instant detailed feedback on assignments with references to videos that students should re-watch based on missed questions and security measures to help detect and defeat cheaters.

7. **Created ECE 6504 Foundations of Mobile Cyber-physical Systems** – This course at Virginia Tech focused on graduate research projects. The projects completed by the graduate students created a number of novel contributions to the field of mobile cyber-physical applications, including: 1) the first mobile method for high-precision augmented reality using structure from motion computer vision algorithms; 2) a high-performance and resource efficient cloud-based approach for predicting what individuals will be at a given location in the future; 3) a new dynamic tessellation algorithm for ensuring K-anonymity in crowd-sourced participatory sensing networks; 4) empirical validation of commodity smartphone GPS and middleware accuracy for use in dynamic software-defined radio adaptation on UAVs; 5) a power-efficient state-based approach to detecting lateness both indoors and outdoors; 6) an approach for using the physical world as the context for secure pairing of smartphones without 3rd party signatories; and 7) an architecture for building ad-hoc 911 services in third-world nations using smartphones.

Selected Press

The following is a selected list of the press coverage that the research and teaching projects I have worked on have received-

1. IBM Research Blog, Coders worldwide help computers understand natural language, <https://www.ibm.com/blogs/research/2020/12/ai-natural-language-competition/>
2. US News, How Technology Helps Visitors and Others Navigate Hospitals, <http://health.usnews.com/wellness/articles/2017-01-18/how-technology-helps-patients-and-other-visitors-navigate-hospitals>
3. Droid Report, Augmented Reality Interview, <http://www.droidreport.com/jules-white-assistant-professor-computer-science-vanderbilt-university-interview-7640>
4. Forbes, Roundup of Free Cloud Computing Online Courses, <http://www.forbes.com/sites/louiscolombus/2014/01/30/roundup-of-free-cloud-computing-online-courses/>
5. eCampus News, 7 Free Online Cloud Computing Courses, <http://www.ecampusnews.com/technologies/cloud-computing-online-311/>
6. MIT Technology Review, The Most Controlling Smartphone Ever Made, <http://www.technologyreview.com/news/508056/the-most-controlling-smartphone-ever-made/>
7. ARS Technica, Researchers Lock Down Android to Keep Data from Walking Out of the Door, <http://arstechnica.com/business/2011/10/researchers-lock-down-android-to-keep-data-from-walking-out-the-door/>

8. Time, Researchers Fine-tune Android to Lock Apps Based on Location, <http://techland.time.com/2011/10/25/researchers-fine-tune-android-to-lock-apps-based-on-location/>
9. Wall Street Journal, Researchers at Virginia Tech have developed software for the Android OS that enforce policies on mobile devices based on what room they're in, http://blogs.wsj.com/digits/2011/10/18/tech-today-apple-yahoo-report-earnings-today/?mod=google_news_blog
10. PC Magazine, VT Technology Locks Apps/Smartphones to a Physical Location, http://www.pcmag.com/article2/0,2817,2394719,00.asp#fbid=_HtZdgnRfIV
11. Huffington Post, Jules White's Debut L.A. Exhibition at the Gregory Way Gallery
12. Huffington Post, 21 of the Coolest Book Covers of the Year
13. CBS Smart Planet, Armed with smartphones, 'citizen scientists' to collect disaster data
14. Discovery Channel Planet Green, Smartphones and citizen scientists can help streamline disaster relief
15. Christian Science Monitor, Venture capital firms think small to help startups
16. Motorola MOTODEV Podcast
17. The Tennessean: Venture Capital Firms Think Small to Help Startups
18. Tech News World: Is Dell Getting Its Android On?
19. The Vanderbilt Hustler: Vanderbilt Students Help Launch Hands-on iPhone Course
20. Inside Higher ED: Where Phones in Class Are OK
21. On GWT: Gwigo - Social Mapping Powered by GWT and AppEngine
22. The Vanderbilt View: Application Inspiration
23. Venture Nashville Connections: 'Smart tech ventures spawned by VU students and entrepreneurs

Panels

1. The Story of Leaf Global Fintech, Vanderbilt 2021
2. Big Data + Privacy in the COVID Era, Vanderbilt, 2020
3. Security - Understanding Threat Vectors, Panelist, FOSE 2012, Washington D.C.
4. Model Based Systems Engineering- A solution to complexity or just a complex solution?, Panelist, DACS Webinar
5. Modeling- Is Standardization Hurting or Helping the Field?, Moderator, Models 2006, Genoa, Italy
6. Introducing Model-Driven Development into the Undergraduate Curriculum, Moderator, Models 2006, Genoa Italy

Invited Talks

1. University of Colorado Boulder, Manufacturing Cybersecurity, Boulder, CO, 2019
2. Federal CPS Interagency Working Group on Cyber-physical Systems, Manufacturing Cybersecurity, May, 2019
3. WICAT Keynote at VT-Wireless Symposium, Blacksburg, VA, 2012

4. SPRUCE - A Case Study in Multi-Dimensional Resource Optimization using Program-scale Data, Candidate Solutions, DACS Webinar, March 2011
5. Raytheon ISaCTN Conference, Dallas, TX, April, 2010
6. IEEE Computer Society Monthly Talk at the University of Alabama at Birmingham, "Optimizing the Configuration of Software Product-line Variants," November, 2008
7. Dagstuhl Perspectives Workshop on Model-Driven Engineering of Complex Systems, "Model Intelligence," August, 2008
8. The University of Alabama at Birmingham, "The Generic Eclipse Modeling System," December, 2008
9. Vanderbilt University EECS Departmental Seminar, Nashville, TN, "Feature Model Based Application Healing," December, 2008
10. Lockheed Martin Advanced Technologies Lab, Cherry Hill, NJ, "Continuous Model Integration," November, 2007
11. Siemens AG, Munich, Germany, "Domain-specific Modeling Languages," June, 2007
12. Siemens AG, Munich, Germany, "Model Intelligence," June, 2007
13. Vanderbilt University EECS Departmental Seminar, Nashville, TN, "Automatic Role-based Constraint Solving," December, 2008
14. University of Waterloo, Waterloo, Canada, "Role-based Object Constraints," December, 2006
15. Siemens AG, Munich, Germany, "Automating Automotive Component Deployment," August, 2006
16. Vanderbilt University EECS Departmental Seminar, Nashville, TN, "Simplifying the Development of Product-line Customization Tools via MDD," November, 2005
17. OMG Real-time & Embedded Systems Workshop, Washington D.C., USA, "Simplifying the Development of QoS-aware EJB Applications via Model-Integrated Computing," July, 2005
18. Raytheon, Portsmouth, Rhode Island, "Simplifying the Development of Autonomic EJB Systems with MDD," April, 2005

Selected Software Development Accomplishments

1. Created the wayfinding system for the Dell Seton Medical Center at the University of Texas at Austin
2. Created the wayfinding system for the Vanderbilt University Medical Center
3. Created the wayfinding system for St. Thomas Midtown Hospital
4. Project leader for the Eclipse Foundation's Generic Eclipse Modeling System (GEMS) project, <http://www.eclipse.org/gmt/gems>.
5. Eclipse Foundation committer.