**Dr. Vijay K. Madisetti**
**Fellow, IEEE**
vkm@madisetti.com
Cell: 770-527-0177
**Address:**
**56 Creekside Park Drive**
**Johns Creek, GA 30022**

## Employment:

- 1989-present: Full Professor of Cybersecurity & Privacy, and Electrical & Computer Engineering (**Georgia Tech, Atlanta, GA 30332**).

**Areas of Technical Interest –** Enterprise Software, Cloud Computing Embedded Systems, Wireless & Mobile Communications, Computer Engineering, Circuit Design (Analog/Digital), Biomedical Instrumentation Hardware/Software, Software Engineering, Digital Signal Processing, Sensors, Wireline & Wireless Computer Networks, Software Systems**,** Control Systems, Chip Design, Cloud Computing.

**Education: PhD** (EECS, University of California at Berkeley, 1989), **B.Tech** (Hons) in Electronics and Electrical Communications Engineering (Indian Institute of Technology, Kharagpur, 1984).

## Startup Companies:

Director, **VP Technologies, Inc**. (1995- ): A startup commercialized through Georgia Tech's Advanced Technology Development Corporation (ATDC) focusing on digital software and hardware design services for military market. http://www.vptinc.net

Director, **Soft Networks, LLC** (2001-2007): A startup commercialized through Georgia Tech support focusing on software development tools and compilers for Cellular/WiFi/VOIP/telecommunication products. http://www.soft-networks.com

Director, **Elastic Video Inc.** (2007- 2009): A startup commercialized through Georgia Tech's VentureLab (http://venturelab.gatech.edu) development image and video processing software for wireless & IP networking.



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## Litigation Experience (2015-2021) With Testimony

**(Note: There may be multiple cases between the parties, e.g., District Court v. ITC, US versus Foreign Cases)**

**Chrimar v. Adtran, Alcatel, et al.**
Technology: Power over Ethernet (2015-2017)
Submitted reports & Deposition & Trial

**Chamberlain v. Ryobi/TTI**
Case No: 1:16-cv-06097 (ND Illinois)
Expert for Ryobi
Technology: Wireless/IoT/Barrier Movement (2016 – 2019)
Submitted reports & deposition & trial testimony

**IOEngine v. IMC/Imation**
Case No: cv-14-1572-GMS (US Delaware)
Expert for IMC/Imation
Technology: Networked Storage Device (2016-2017)
Submitted reports & deposition & trial testimony

**Huawei v. Samsung**
Case No: 3:16-cv-2787-WHO (ND Cal)
Expert for Samsung
Technology: 4G/LTE Random Access Protocols (2016-2019)
Submitted reports & deposition

**Hitachi Maxell v. ZTE/Huawei**
Case No: 5:16-cv-00178-RWS (ED Texas)
Expert for Hitachi Maxell
Technology: Digital Cameras
Submitted reports & deposition (2017 – 2018)

**Hitachi Maxell v. Apple**
Case No: 5:19-cv-00036-RWS
Expert for Hitachi Maxell
Technology: Digital Cameras
Submitted Expert Reports (2020-)

**Qualcomm v. Apple**
Case No: 17-ccv-0108-GPC-MDD (SD Cal) Also, Related ITC/FTC Matters
Expert for Qualcomm
Technology: 4G/Wireless Communications/Smartphones (2017-2019)
Submitted Reports and Deposition



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**Qualcomm v. Apple**
Case No: 3:17-cv-01375-DMS-MDD (SD Cal)
Expert for Qualcomm
Technology: 4G/Wireless Communications/Smartphones (2017-2019)
Submitted Reports and Deposition

**Optis v. Huawei**
Case No: 2:17-cv-123 (E.D. Texas)
Expert for Optis Wireless
Technology: 4G/Video (2017-2019)
Submitted reports & deposition

**Beckman Coulter v. Sysmex**
Case No: 1:17-cv-24049-DPG (ND Illinois)
Expert for Sysmex
Technology: Medical Instrumentation Automation (2017-present)
Testifying Expert

**TQ Delta v. Xyxel/Adtran**
Expert for TQ Delta
Technology: DSL Technologies (2018-present)
Testifying Expert

**3GL/KPN v. LG, Blackberry, HTC**
Expert for 3GL/KPN
Technology: 4G/LTE Protocols (2018-present)
Reports and Deposition / Testifying Expert

**Rovi v. Comcast**
ITC No. 337-TA-1103 (ITC)
Expert for Rovi
Technology: Digital Video & interactive GUI (Jan 2018-May 2018)
Reports and Deposition

**Cirba/Densify v. VMWare**
Case No: 1:19-cv-00742-LPS
Expert for Cirba/Densify
Technology: Virtualization (2019-present)
Reports Deposition/PI Hearing / Testifying Expert

**Power Integrations v. On Semiconductor**
Case No: 17-cv-03189-BLF
Expert for On Semiconductor
Technology: Power Electronics (2018-2019)


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Reports & Deposition/Testifying Expert.

**Pathway v. Lumens, IPEVO, Aver JDA**
Case No: ITC 337-TA-1045
Expert for Lumens JDA
Technology: Document Cameras (2016-2019)
Reports & Deposition (for IPR/ITC, no trial)

**Wilan v. Apple**
Case No: 3:14-cv-2235
Expert for WiLan
Technology: Voice over LTE/LTE Protocols (2017-2020)
Reports and Testified through Deposition/Trials

**St. Lawrence Comm. v. Amazon**
Case No. 2:19-CV-00027-JRG
Expert for Amazon
Technology: Multimedia Codecs
Submitted Expert Reports/Deposition (2020-2020)

**PanOptis v. Apple**
Case No. 2:19-CV-00066-JRG
Expert for PanOptis
Technology: LTE
Submitted Expert Reports/Deposition/Trial (2019-2020)

**GAS v. Sprint Communications**
Case No. 2:20-cv-00007-RWS
Expert for General Access (GAS)
Technology: LTE
Submitted Expert Reports/Deposition (9/21-)

**Causum v. Ecobee, Itron, et al**
Case No. ITC 337-TA-1277
Expert for Causum
Technology: Load Management
Submitted Expert Reports and Deposition (6/22)

Additional matters include declarations supporting IPRs at the PTAB for Google (US Patent 8,601,154), On Semiconductor (US Patent 6,212,079), Ubisoft (US Patent 5,490,216), Lumens JDA (2017-2019), Broadcom (WiFi), Sony (US Patent 6,101,534), Kia, (US Patent 5,530,431), Qualcomm, Ericsson, Daimler Benz,



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VW, Estech, Amazon, Ring, Digital Ally, On Semiconductor, United Patents, Lenovo, BMC Software, BMW, Daimler and Dolby.

## Earned Degrees

1. **B. Tech (Hons), Electronics & Electrical Comm. Engineering**
   *Indian Institute of Technology (IIT), Kharagpur, India*
   1984.

2. **Ph.D., Electrical Engineering & Computer Sciences (EECS)**
   *University of California (UC), Berkeley. CA*
   1989.

## Books

1. **VLSI Digital Signal Processors**
   *Madisetti, V.K.;*
   Boston: MA, IEEE Press: Butterworth Heinemann, 1995, 525 pp.

2. **Quick-Turnaround ASIC Design in VHDL**
   *Romdhane, M., Madisetti, V.K., Hines, J.*
   Boston: MA, Kluwer Academic Press, 1996, 190 pp.

3. **The Digital Signal Processing Handbook (First Edition)**
   *Madisetti, V. K., Williams, D. (Editors)*
   CRC Press, Boca Raton, Fla, 1998, 2500 pp.

4. **VHDL: Electronics Systems Design Methodologies**.
   *Madisetti, V. K. (Editor)*
   Boston: MA, IEEE Standards Press, 2000, ISBN 0-7381-1878-8.

5. **Platform-Centric Approach to System-on-Chip (SoC) Design.**
   *Madisetti, V. K., Arpnikanondt, A.*
   Springer, Boston: MA, Springer, 2004, 280 pp.

6. **The Digital Signal Processing Handbook – Second Edition.**
   Madisetti, V. K. (2009)
   CRC Press, Boca Raton, Fla.

7. **Cloud Computing: A Hands-On Approach**
   *A Bahga, V. Madisetti (2013)*



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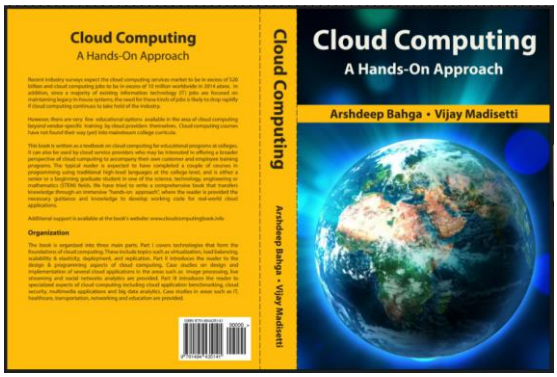
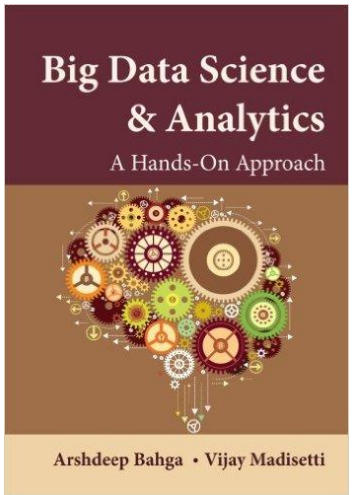
Amazon CreateSpace Publishing, 2013, 454 pp.

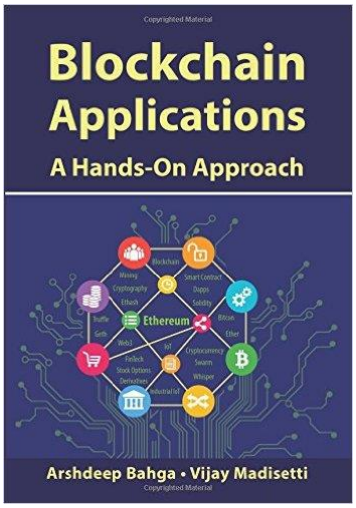
**8. Internet of Things: A Hands-On Approach**
*A Bahga, V. Madisetti (2014)*
Amazon CreateSpace Publishing, 2014, 450 pp.




**9. Big Data Science & Analytics: A Hands-On Approach**
*A Bahga, V. Madisetti (2016)*
Amazon CreateSpace Publishing, 2016, 542 pp.




**10.Blockchain Applications: A Hands-On Approach**
*A Bahga, V. Madisetti (2017)*
Amazon CreateSpace Publishing, 2017, 380 pp.




## Edited Books & Collection of Papers

1. **Advances in Parallel & Distributed Simulation**
   *Madisetti, V.K.;Nicol, D., Fujimoto, R. (Editors)*
   San Diego, CA: SCS Press, 1991, 200 pp.

2. **Modeling, Analysis, Simulation of Computer & Telecommunications Systems**
   *Madisetti, V., Gelenbe, E., Walrand, J. W. (Editors)*
   Los Alamitos: CA, IEEE Computer Society Press, 1994, 425 pp.

3. **Modeling & Simulations on Microcomputers**
   *Madisetti, V.K. (Editor)*
   San Diego, CA: SCS Press, 138 pp. 1990.

## Editorship of Journals & Transactions

1. **IEEE Design & Test of Computers**
   Special Issue: Reengineering Digital Systems
   April – June 1999 (Vol 16, No 2)
   *Madisetti, V.K (Editor)*
   Los Alamitos: CA, IEEE Computer Society Press, 1999.

2. **IEEE Design & Test of Computers**
   Special Issue: Rapid Prototyping of Digital Systems
   Fall 1996 (Vol 13, No 3)
   *Madisetti, V., Richards, M. (Editors)*
   Los Alamitos: CA, IEEE Computer Society Press, 1994, 425 pp.

3. **IEEE Transactions on Circuits & Systems II**
   *Associate Editor*: 1993-1995.

4. **International Journal in Computer Simulation**
   *Associate Editor: 1990-1993*

5. **International Journal in VLSI Signal Processing**
   *Editorial Board: 1995 - Present*

## Recent Issued US Patents

[1] 10,503,927 Method and system for securing cloud storage and databases from insider threats and optimizing performance, Issued Dec 10, 2019

[2]. 10,460,283 Smart contract optimization for multiparty service or product ordering system, Issued Oct 29, 2019

[3]. 10,459,946 Method and system for tuning blockchain scalability, decentralization, and security for fast and low-cost payment and transaction processing, Issued Oct 29, 2019



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[4]. 10,402,589 Method and system for securing cloud storage and databases from insider threats and optimizing performance, Issued Sep 3, 2019

[5]. 10,394,845 Method and system for tuning blockchain scalability for fast and low-cost payment and transaction processing, Issued Aug 27, 2019

[6]. 10,289,631 Method and system for tuning blockchain scalability for fast and low-cost payment and transaction processing, Issued May 24, 2019

[7]. 10,255,342 Method and system for tuning blockchain scalability, decentralization, and security for fast and low-cost payment and transaction processing, Issued April 9, 2019

[8]. 10,243,743 Tokens or crypto currency using smart contracts and blockchains, Issued March 26. 2019

[9]. 10,204,339 Method and system for blockchain-based combined identity, ownership, integrity and custody management, Issued February 12, 2019

[10]. 10,204,148 Method and system for tuning blockchain scalability, decentralization, and security for fast and low-cost payment and transaction processing, Issued Feb 12, 2019

[11]. 10,121,143 Method and system for blockchain-based combined identity, ownership, integrity and custody management, Issued Nov 6, 2018

[12]. 10,102,526 Method and system for blockchain-based combined identity, ownership, integrity and custody management, October 16, 2018

[13]. 10,102,265 Method and system for tuning blockchain scalability for fast and low-cost payment and transaction processing, October 16, 2018

[14]. 9,935,772 Methods and systems for operating secure digital management aware applications, April 3, 2018

[15]. 9,769,213 Method and system for secure digital object management, Issued Sep 19, 2017

## Refereed Journal Publications

1. **Trends in the Electronic Control of Mine Hoists**
   *Madisetti, V. and Ramlu, M.*,
   *IEEE Transactions on Industry Applications, Vol IA-22, No. 6, November/December 1986. Pages 1105-1112*

2. **Multilevel range/NEXT performance in digital subscriber loops**
   *Brand, G.; Madisetti, V.; Messerschmitt, D.G.;*
   Communications, Speech and Vision, IEE Proceedings I [see also IEE



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Proceedings-Communications] ,Volume: 136 , Issue: 2 , April 1989
Pages:169 – 174

3. **Seismic migration algorithms on parallel computers**
   *Madisetti, V.K.; Messerschmitt, D.G.;*
   Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Signal Processing, IEEE Transactions on] ,Volume: 39 , Issue: 7 , July 1991
   Pages:1642 – 1654

4. **Asynchronous algorithms for the parallel simulation of event-driven dynamical systems**
   *Madisetti, V.K.; Walrand, J.C.; Messerschmitt, D.G.:*
   ACM Transactions on Modeling and Computer Simulation, v 1, n 3, July 1991,
   Pages: 244-74

5. **Synchronization mechanisms for distributed event-driven computation**
   *Madisetti, V.K.; Hardaker, D.:*
   ACM Transactions on Modeling and Computer Simulation, v 2, n 1, Jan. 1992,
   Pages: 12-51

6. **Efficient VLSI Architectures for the Arithmetic Fourier Transform (AFT)**
   *Kelley, B.T.; Madisetti, V.K.;*
   Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Signal Processing, IEEE Transactions on] ,Volume: 41 , Issue: 1 , January 1993
   Pages:365-378

7. **The fast discrete Radon transform. I. Theory**
   *Kelley, B.T.; Madisetti, V.K.;*
   Image Processing, IEEE Transactions on ,Volume: 2 , Issue: 3 , July 1993
   Pages:382 – 400

8. **The Georgia Tech digital signal multiprocessor**
   *Barnwell, T.P., III; Madisetti, V.K.; McGrath, S.J.A.;*
   Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Signal Processing, IEEE Transactions on] ,Volume: 41 , Issue: 7 , July 1993
   Pages:2471 – 2487

9. **The MIMDIX Environment for Parallel Simulation**
   *Madisetti, V.K.; Hardaker, D.; Fujimoto, R.M.:*
   Journal of Parallel and Distributed Computing, v18, no. 4, August 1993,
   Pages: 473-83.



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**10. LMSGEN: a prototyping environment for programmable adaptive digital filters in VLSI**
*Romdhane, M.S.B.; Madisetti, V.K.;*
Chapter in VLSI Signal Processing, VII, 1994.,
Pages:33 – 42

**11. Fixed-point co-design in DSP**
*Egolf, T.W.; Famorzadeh, S.; Madisetti, V.K.;*
Chapter in VLSI Signal Processing, VII, 1994.,
Pages:113 - 126

**12. A fast spotlight-mode synthetic aperture radar imaging system**
*Madisetti, V.K.;*
Communications, IEEE Transactions on ,Volume: 42 , Issue: 234 , February-April 1994
Pages:873 – 876

**13. Rapid prototyping on the Georgia Tech digital signal multiprocessor**
*Curtis, B.A.; Madisetti, V.K.;*
Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Signal Processing, IEEE Transactions on] ,Volume: 42 , Issue: 3 , March 1994
Pages:649 – 662

**14. Low-power signaling in asymmetric noisy channels via spectral shaping**
*Sipitca, M.; Madisetti, V.K.;*
Signal Processing Letters, IEEE, Volume: 1 , Issue: 8 , Aug 1994
Pages:117 – 118

**15. A quantitative methodology for rapid prototyping and high-level synthesis of signal processing algorithms**
*Madisetti, V.K.; Curtis, B.A.;*
Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Signal Processing, IEEE Transactions on] ,Volume: 42 , Issue: 11 , Nov. 1994
Pages:3188 – 3208

**16. Computer Simulation of Application-Specific Signal Processing Systems**
*Casinovi, G.; Madisetti, V.K.;*
International Journal in Computer Simulation, Vol. 4, No. 4, Nov 1994.

**17. System partitioning of MCMs for low power**
*Khan, S.A.; Madisetti, V.K.;*
Design & Test of Computers, IEEE ,Volume: 12 , Issue: 1 , Spring 1995
Pages:41 – 52



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**18. Error correcting run-length limited codes for magnetic recording**
*Jaejin Lee; Madisetti, V.K.;*
Magnetics, IEEE Transactions on ,Volume: 31 , Issue: 6 , Nov. 1995
Pages:3084 – 3086

**19. Virtual prototyping of embedded microcontroller-based DSP systems**
*Madisetti, V.K.; Egolf, T.W.;*
Micro, IEEE ,Volume: 15 , Issue: 5 , Oct. 1995
Pages:9 – 21

**20. Constrained multitrack RLL codes for the storage channel**
*Lee, J.; Madisetti, V.K.;*
Magnetics, IEEE Transactions on ,Volume: 31 , Issue: 3 , May 1995
Pages:2355 – 2364

**21. Rapid digital system prototyping: current practice, future challenges**
*Madisetti, V.K.;*
Design & Test of Computers, IEEE ,Volume: 13 , Issue: 3 , Fall 1996
Pages:12 – 22

**22. Conceptual prototyping of scalable embedded DSP systems**
*Dung, L.-R.; Madisetti, V.K.;*
Design & Test of Computers, IEEE ,Volume: 13 , Issue: 3 , Fall 1996
Pages:54 – 65

**23. Advances in rapid prototyping of digital systems**
*Madisetti, V.K.; Richards, M.A.;*
Design & Test of Computers, IEEE ,Volume: 13 , Issue: 3 , Fall 1996
Pages:9

**24. Combined modulation and error correction codes for storage channels**
*Jaejin Lee; Madisetti, V.K.;*
Magnetics, IEEE Transactions on ,Volume: 32 , Issue: 2 , March 1996
Pages:509 – 514

**25. Model-based architectural design and verification of scalable embedded DSP systems-a RASSP approach**
*Dung, L.-R.; Madisetti, V.K.; Hines, J.W.;*
Chapter in VLSI Signal Processing, IX, 1996.
Pages:147 – 156

**26. Low-power digital filter implementations using ternary coefficients**
*Hezar, R.; Madisetti, V.K.;*
Chapter in VLSI Signal Processing, IX, 1996.,
Pages:179 – 188

**27. All-digital oversampled front-end sensors**
*Romdhane, M.S.B.; Madisetti, V.K.;*
Signal Processing Letters, IEEE, Volume: 3 , Issue: 2 , Feb. 1996
Pages:38 – 39

**28. Modeling COTS components in VHDL**
*Calhoun, S., Reese, R; Egolf, T., Madisetti, V.K.;*
Journal of VLSI Signal Processing, Volume: 14 , Issue: 2 , Nov 1996
Pages: 24 – 31

**29. VHDL-Based Rapid Systems Prototyping**
*Egolf, T.; Madisetti, V.K.;*
Journal of VLSI Signal Processing, Volume: 14 , Issue: 2 , Nov 1996
Pages: 40-52

**30. Interface design for core-based systems**
*Madisetti, V.K.; Lan Shen;*
Design & Test of Computers, IEEE ,Volume: 14 , Issue: 4 , Oct.-Dec. 1997
Pages:42 - 51

**31. Incorporating cost modeling in embedded-system design**
*Debardelaben, J.A.; Madisetti, V.K.; Gadient, A.J.;*
Design & Test of Computers, IEEE ,Volume: 14 , Issue: 3 , July-Sept. 1997
Pages:24 – 35

**32. On homomorphic deconvolution of bandpass signals**
*Marenco, A.L.; Madisetti, V.K.;*
Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Signal Processing, IEEE Transactions on] ,Volume: 45 , Issue: 10 , Oct. 1997
Pages:2499 – 2514

**33. A case study in the development of multi-media educational material: the VHDL interactive tutorial**
*Gadient, A.J.; Stinson, J.A., Jr.; Taylor, T.C.; Aylor, J.H.; Klenke, R.H.; Salinas, M.H.; Madisetti, V.K.; Egolf, T.; Famorzadeh, S.; Karns, L.N.; Carter, H.W.;*
Education, IEEE Transactions on ,Volume: 40 , Issue: 4 , Nov. 1997
Pages:17 pp.



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**34. Adaptive mobility management in wireless networks**
*Jeongwook Kim; Madisetti, V.K.;*
Electronics Letters ,Volume: 34 , Issue: 15 , 23 July 1998
Pages:1453 – 1455

**35. Efficient implementation of two-band PR-QMF filterbanks**
*Hezar, R.; Madisetti, V.K.;*
Signal Processing Letters, IEEE ,Volume: 5 , Issue: 4 , April 1998
Pages:92 – 94

**36. On fast algorithms for computing the inverse modified discrete cosine transform**
*Yun-Hui Fan; Madisetti, V.K.; Mersereau, R.M.;*
Signal Processing Letters, IEEE ,Volume: 6 , Issue: 3 , March 1999
Pages:61 – 64

**37. System on chip or system on package?**
*Tummala, R.R.; Madisetti, V.K.;*
Design & Test of Computers, IEEE ,Volume: 16 , Issue: 2 , April-June 1999
Pages:48 – 56

**38. Reengineering legacy embedded systems**
*Madisetti, V.K.; Jung, Y.-K.; Khan, M.H.; Kim, J.; Finnessy, T.;*
Design & Test of Computers, IEEE ,Volume: 16 , Issue: 2 , April-June 1999
Pages:38 – 47

**39. Reengineering digital systems**
*Madisetti, V.K.;*
Design & Test of Computers, IEEE ,Volume: 16 , Issue: 2 , April-June 1999
Pages:15 – 16

**40. Parameter optimization of robust low-bit-rate video coders**
*Sangyoun Lee; Madisetti, V.K.;*
Circuits and Systems for Video Technology, IEEE Transactions on, Volume: 9
Issue: 6 , Sept. 1999
Pages:849 – 855

**41. Closed-form for infinite sum in bandlimited CDMA**
*Jatunov, L.A.; Madisetti, V.K.;*
Communications Letters, IEEE ,Volume: 8 , Issue: 3 , March 2004
Pages:138 – 140

**42. A new protocol to enhance path reliability and load balancing in mobile ad hoc networks**
*Argyriou, A.; Madisetti, V.K.;*



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Journal of Ad Hoc Networks, Elsevier Press, 2004

**43. Closed-form analysis of CDMA systems using Nyquist pulse**
*Jatunov, L.A.; Madisetti, V. K.;*
Communications Letters, IEEE (Under Revision), 2005.

**44. Systematic Design of End-to-End Wireless Mobility Management Prototocols,**
*Argyriou, A.; Madisetti, V. K.;*
ACM/Springer Wireless Networks (WINET), Accepted 2005.

**45. A Novel End-to-End Approach for Video Streaming Over the Internet,**
*Argyriou, A.; Madisetti, V. K.;*
Kluwer Telecommunications Systems, Vol. 28, No. 2, Pages 133-150, Jan 2005. *Special Issue on Multimedia Streaming.*

**46. An Analytical Framework of RD Optimized Video Streaming with TCP,**
*Argyriou, A.; Madisetti, V. K.;*
IEEE Transactions on Multimedia, Submitted for review in March 2005.

**47. Modeling the Effect of Handoffs on Transport Protocol Performance,**
*Argyriou, A.; Madisetti, V. K.;*
IEEE Transactions on Mobile Computing, Submitted for review in March 2005

**48. Throughput Models for Transport Protocols with CBR and VBR Traffic Workloads",**
*Argyriou, A.; Madisetti, V. K.;*
ACM Transactions on Multimedia Computing, Communications & Applications, Submitted for review in April 2005.

**49. "Electronic System, Platform & Package Codesign",**
*Madisetti, V. K.*
*IEEE Design & Test of Computers*, Volume 23, Issue 3, June 2006. pages 220-233.

**50. "The Design of an End-to-End Handoff Management Protocol",**
*A. Argyriou, Madisetti, V. K.*
*Wireless Networks, Springer, May 2006.*

**51."A Soft-Handoff Transport Protocol for Media Flows in Heterogeneous Mobile Networks ",**
*A. Argyriou, Madisetti, V. K.*
*Computer Networks, Vol 50, Issue 11, Pages 1860-1871, August 2006.*



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**52. "Computationally Efficient SNR Estimation for Bandlimited WCDMA Systems"**
*L. Jatunov, Madisetti, V. K.*
*IEEE Transactions on Wireless Communications, Volume 5, Issue 13, December 2006, Pages 3480-3491.*

**53."Space-Time Codes for Wireless & Mobile Applications",**
*M. Sinnokrot, Madisetti, V.K.*
*DSP Handbook, Second Edition, 2009 (to be published)*

**54.**A. Bahga, V. Madisetti, "**Rapid Prototyping of Advanced Cloud-Based Systems**", *IEEE Computer*, vol. 46, no. 11, Nov 2013, pp 76-83, 2013

**55.**A. Bahga, V. Madisetti, "**Cloud-Based Information Integration & Informatics Framework for Healthcare Application**s", *IEEE Computer*, February 2015.

**56.**A. Bahga, V. Madisetti, "**A Cloud-based Approach for Interoperable EHRs**", *IEEE Journal of Biomedical and Health Informatics*, vol. 17, no. 5, Sep 2013, pp. 894-906, 2013

**57.**A. Bahga, V. Madisetti, "**Cloud-Based Information Technology Framework for Data Driven Intelligent Transportation Systems**", *Journal of Transportation Technologies*, vol.3 no.2, April 2013

**58.**A. Bahga, V. Madisetti, **"Performance Evaluation Approach for Multi-tier Cloud Applications"**, *Journal of Software Engineering and Applications*, vol. 6, no. 2, pp. 74-83, Mar 2013.

**59.**Yusuf, A., V. Madisetti, **"Configuration for Predicting Travel Time Using Wavelet Packets and Support Vector Regression**", ***Journal of Transportation Technologies***, vol 3, no. 3, June 2013.

**60.**A. Bahga, V. Madisetti, **"Analyzing Massive Machine Maintenance Data in a Computing Cloud"**, *IEEE Transactions on Parallel and Distributed Systems*, vol. 23, no. 10, pp. 1831 - 1843, 2012.

**61.**N. Radia. Y. Zhang, M. Tatimapula, V. Madisetti, **"Next Generation Applications on Cellular Networks: Trends, Challenges, and Solutions**," *Proceedings of the IEEE*, Vol 100, Issue 4, pp. 841-854, 2012.

**62.**A. Bahga, V. Madisetti, "**Rapid Prototyping of Advanced Cloud-Based Systems**", *IEEE Computer*, vol. 46, no. 11, Nov 2013, pp 76-83, 2013



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**63.** A. Bahga, V. Madisetti, "**A Cloud-based Approach for Interoperable EHRs**", *IEEE Journal of Biomedical and Health Informatics*, vol. 17, no. 5, Sep 2013, pp. 894-906, 2013

**64.** A. Bahga, V. Madisetti, "**Cloud-Based Information Integration & Informatics Framework for Healthcare Application**s", *IEEE Computer*, February 2015.

## Peer Reviewed Conference Publications

1. **Dynamically-reduced complexity implementation of echo cancelers**
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## Ph.D. Students Graduated

1. **Brian T. Kelley, 1992**
   *VLSI Computing Architectures for High Speed Signal Processing*
   Member of Technical Staff, Motorola.

   Winner of Dr. Thurgood Marshall Dissertation Fellowship Award

2. **Bryce A. Curtis, 1992**
   *Special Instruction Set Multiple Chip Computer for DSP*
   Member of Technical Staff, IBM

3. **Jaejin Lee, 1994**
   *Robust Multitrack Codes for the Magnetic Channel*
   Professor, Yonsei University, Korea

4. **Mohamed S. Ben Romdhane, 1995**
   *Design Synthesis of Application-Specific IC for DSP*
   Director of IP, Rockwell.

5. **Shoab A. Khan, 1995**
   *Logic and Algorithm Partitioning on MCMs*
   Professor, National University of Science & Technology, Pakistan

6. **Lan-Rong Dung, 1997**
   *VHDL-based Conceptual Prototyping of Embedded DSP Architectures*
   Professor, National Chaio Tung University, Taiwan.



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Winner of VHDL International Best PhD Thesis Award, 1997

7. **Thomas W. Egolf, 1997**
   *Virtual Prototyping of Embedded DSP Systems*
   Distinguished Member of Technical Staff, Agere

8. **Alvaro Marenco, 1997**
   *On Homomorphic Deconvolution of Bandpass Signals*
   Professor, Texas A&M University.

   Winner of GIT ECE Outstanding Teaching Assistant Award

9. **Shahram Famorzadeh, 1997**
   *BEEHIVE: A Distributed Environment for Adaptive Signal Processing*
   Member of Technical Staff, Rockwell.

10. **Timothy J. Klausutis, 1997**
    *Adaptive Lapped Transforms with Applications to Image Coding.*
    US Air Force/Univ. of Florida.

11. **Lan Shen, 1998**
    *Temporal Design of Core-Based Systems*
    Member of Technical Staff, IBM

12. **James DeBardelaben, 1998**
    *Optimization Based Approach to Cost Effective DSP Design*
    Research Scientist, Johns Hopkins University

    Georgia Tech ECE Faculty Award

13. **Sangyoun Lee, 1999**
    *Design of Robust Video Signal Processors*
    Professor, Yonsei University

    US Army Sensors Lab Research Excellence Award, 1999

14. **Rahmi Hezar, 2000**
    *Oversampled Digital Filters*
    Member of Technical Staff, Texas Instruments

15. **Yong-kyu Jung, 2001**
    *Model-Based Processor Synthesis*
    Professor, Texas A&M University

16. **Mustafa Turkboylari, 2002**
    *Handoff Algorithms for Wireless Applications*
    Member of Technical Staff, Texas Instruments

17. **Yun-Hui Fan, 2002**
    *A Stereo Audio Coder with Nearly Constant Signal to Noise Ratio*
    Post-Doctoral Research Associate, Northeastern University

18. **Subrato K. De, 2002**



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*Design of a Retargetable Compiler for DSP*
Member of Technical Staff, Qualcomm

US Army Sensors Lab Research Excellence Award, 1999

**19. Chonlameth Aripnikanondt, 2004**
*System-on-Chip Design with UML*
*Professor, King Mongkut's University, Thailand.*

US Army Sensors Lab Research Excellence Award, 1999

**20. Loran Jatunov, 2004**
*Performance Analysis of 3G CDMA Systems*
Senior Research Scientist, Soft Networks, LLC.

**21. Antonios Argyriou, 2005**, Serving in Hellenic Army.

**22. Pilho Kim, 2009, Scientist, VP Technologies, Inc.**

**23. M. Sinnokrot, 2009, Staff Engineer, Qualcomm.**

## Awards & Honors

1. **Jagasdis Bose National Science Talent Fellowship**, Indian Institute of Technology, Kharagpur, 1980-1984.

2. **General Proficiency Prize**, Indian Institute of Technology, Kharagpur, 1984.

3. **Demetri Angelakos Outstanding Graduate Student Award**, Univ. of California, Berkeley, 1989

4. **Ira Kay IEEE/ACM Best Paper Award** for Best Paper presented at IEEE Annual Simulation Symposium, 1989

5. **IBM Faculty Development Award** 1990

6. **Technical Program Chair**, IEEE Workshop on Parallel and Distributed Simulation. 1990.

7. **Technical Program Chair**, IEEE MASCOTS'94

8. **NSF RI Award**, 1990

9. **VHDL International Best PhD Dissertation Advisor Award**, 1997



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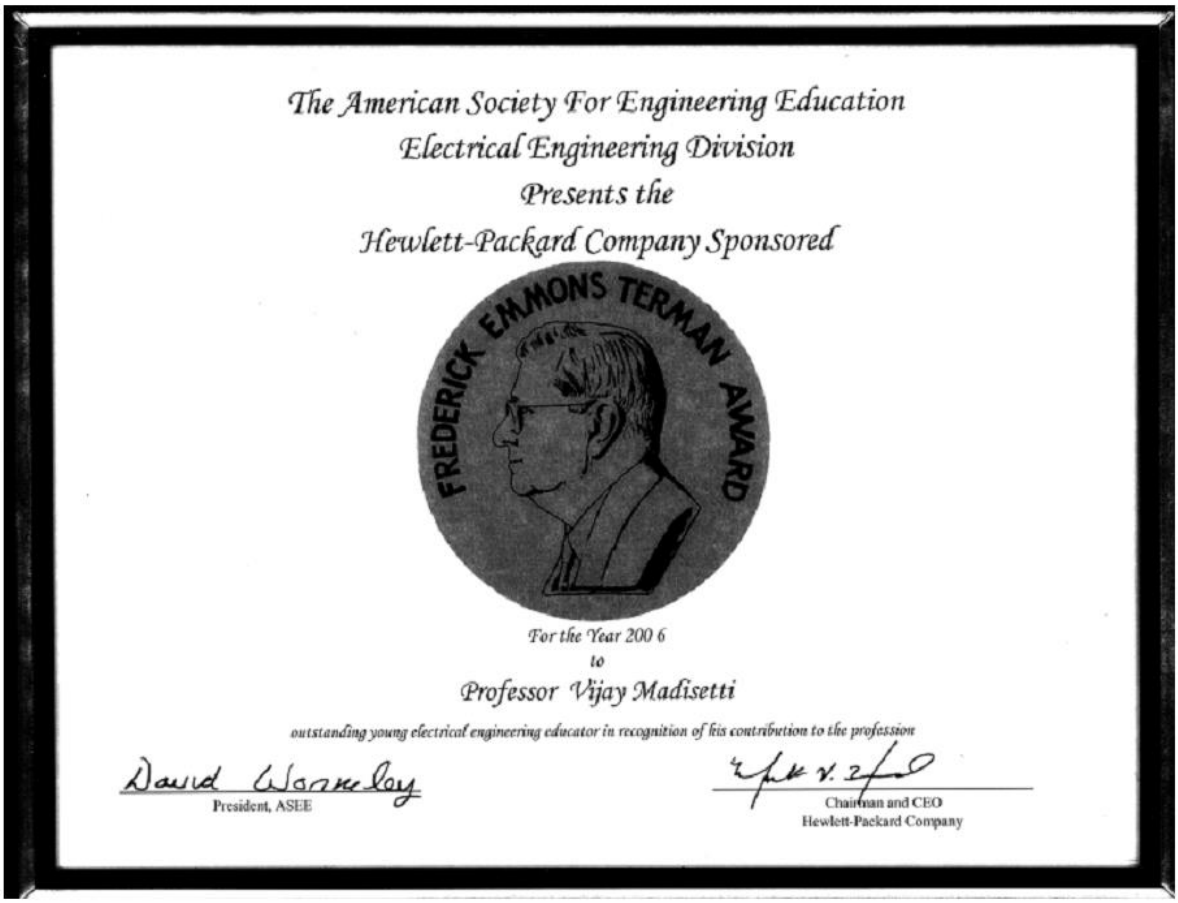
10. **Georgia Tech Outstanding Doctoral Dissertation Advisor Award**, 2001.

11. **ASEE 2006 Frederick Emmons Terman Medal, 2006.**

12. **Fellow of IEEE**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## Intellectual Property Disclosures (Georgia Tech)

| Patent | Date | Description |
|---|---|---|
| 2843 | 2004 | Method and Apparatus for Improving the Performance of Wireless LANs |
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| 2480 | 2001 | Mobile Fleet Application based on SyD Technology |
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| 1893 | 1999 | Beehive |
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**Issued Patents**: 9,935,772, 9,769,213



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