Dr. Vijay K. Madisetti
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Address:
225 Dodd Ln
Alpharetta, GA 30005

Employment:

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

Areas of Technical Interest – Topics in Computer Science, Electrical Engineering, and Computer Engineering.

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.

Litigation Experience (2019-2024) With Testimony

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

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, Verizon et al.
Case No. 2:20-cv-00007-RWS
Expert for General Access (GAS)
Technology: LTE/5G
Submitted Expert Reports/Deposition (9/21-22)

Causam v. Ecobee, Itron, et al
Case No. ITC 337-TA-1277
Expert for Causum
Technology: Load Management
Submitted Expert Reports and Deposition (6/22-8/23)

Masimo v. Apple
Case No. ITC 337-TA-1276 and related cases (Trade Secret & Delaware)
Expert for Masimo (2018-)
Technology: Pulse Oximetry
Submitted Expert Reports, Deposition & Trial

TQ Delta v. Nokia, Adtran, CommScope, 2Wire, et al
Cases in Delaware & Texas
Expert for TQ Delta (2019 -)
Technology: DSL and Cable Modems
Submitted Expert Reports, Depositions & Hearings.

Paltalk Holdings v. Cisco Systems Inc.
Western District of Texas (6:21-CV-00757-ADA)
Expert for Paltalk Holdings (2022-2024)
Technology: VOIP Technologies
Submitted Expert Reports and Deposition

Ollnova Technologies v. Carrier Group, Ecobee, et al
Southern District of Florida (Case 9:22-cv-80388-DMM) & ED Texas
Expert for Ollnova (2022-2023)
Technology: IoT
Submitted Report and Deposition & Trial

VideoLabs v. Asus, et al
Case No: ITC 337-TA-1323
Expert for VideoLabs (2022-2023)
Technology: Video Conferencing
Reports and Depositions

3GKL/KPN v. LG/Gemalto, TCL, HTC, Blackberry
Case No: 1;17-cv-00086-LPS
Expert for KPN/3GL (2017-2023)
Technology: Wireless Communications, Video Conferencing
Reports, Depositions, Trial

ViaTech v. Adobe
District of Delaware (CA No. 20-358-RGA-MPT)
Expert for ViaTech (2019-2023)
Technology: Software Licensing
Reports, Deposition, and Trial Testimony

Zilkr v. Cisco
ED Texas, Marshall (Case 2:22-CV-166-JRB-RSP)
Expert for Zilkr (2022-)
Technology: Webex
Reports & Deposition

HouseCanary versus Amrock/Intuit
District Court Bexar County, Tx (2016-CI-06300)
Expert for House Canary (2023-)
Technology: Machine Learning
Reports & Deposition

SpaceTime 3D v. Apple
WD Texas Waco (1-23-cv-00553-ADA)
Expert for SpaceTime 3D
Technology: User Interfaces (2022-)
Reports & Deposition

Pantech v. LG

ED Texas Texarkana (5:22-cv-00113)
Expert for LG (2023-2024)
Technology: Multitasking in Mobile Platforms
Reports & Deposition.

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, VW, Estech, Amazon, Ring, Digital Ally, On Semiconductor, LoganTree, Unified Patents, BMC Software, Masimo, Sentius, BMW, Facebook, LG, PAWS, Google, Daimler, FedEx, Surge LLC, 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.

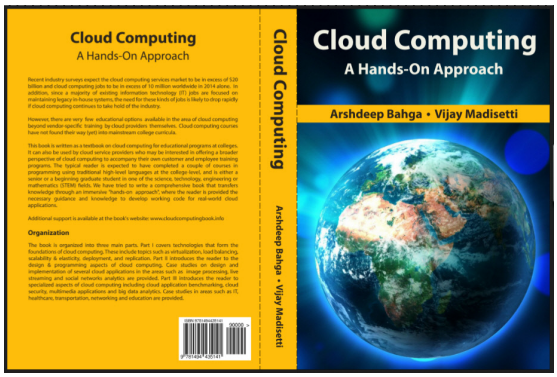
4. **VHDL: Electronics Systems Design Methodologies**.
   Madisetti, V. K. (Editor)
   Boston: MA, IEEE Standards Press, 2000, ISBN 0-7381-1878-8.

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.

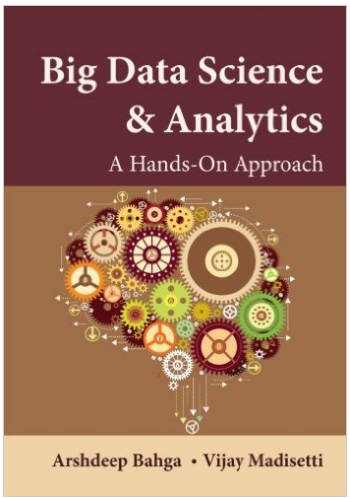
7. **Cloud Computing: A Hands-On Approach**
   A Bahga, V. Madisetti (2013)
   KDP Press, 2013, 454 pp. Outside US Published by *Universities Press* (Ex-Pearson). Selected as *Best in Computing 2014* (By *ACM Computing Reviews*)

8. **Internet of Things: A Hands-On Approach**
   A Bahga, V. Madisetti (2014)
   KDP Press, 2014, 450 pp. Outside US Published by *Universities Press* (Ex-Pearson),



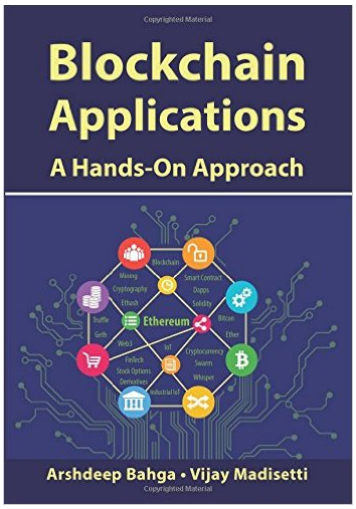
9. Big Data Science & Analytics: A Hands-On Approach
A Bahga, V. Madisetti (2016)
KDP Press, 2016, 542 pp.

[*The book will tremendously benefit those who are interested in BDA*: *ACM Computing Reviews]*



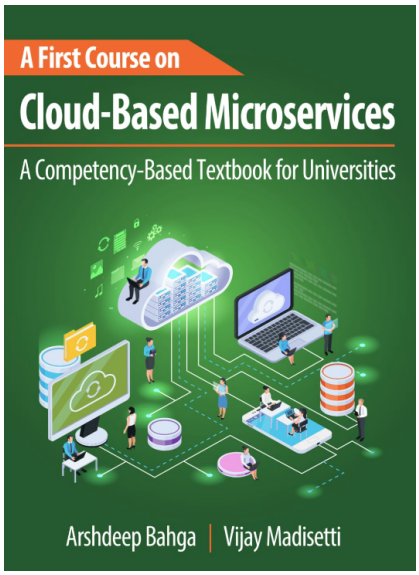
10.Blockchain Applications: A Hands-On Approach
A Bahga, V. Madisetti (2017)
KDP Press, 2017, 380 pp.

[The balance between explanation of architecture and more technical proof of concept through code is quite engaging: ACM Computing Reviews]



11. Cloud Solutions Architect: A Hands-On Approach
A Bahga, V. Madisetti (2020)
KDP Press, 2020, 930 pp.

12. A First Course in Cloud-Based Microservices
A Bahga, V. Madisetti (2024)
KDP Press, 2024, 590 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

Issued US Patents (Recent)

[1] 11,580,540 Methods and systems for smart contracts for security and filtering, Issued February 14, 2023

[2] 11,556,928 Methods and systems for smart contracts for security and filtering, Issued January 17, 2023

[3] 11,553,039 Service meshes and smart contracts for zero-trust systems, Issued January 10, 2023

[4] 11,538,031 Method and system for identity and access management for blockchain interoperability, Issued December 27, 2022

[5] 11,528,147 Verifying integrity and secure operations of cloud-based software services, Issued December 13, 2022

[6] 11,526,879 Method and system for zero-knowledge and identity based key management for decentralized applications, Issued December 13, 2022

[7] 11,494,764 Methods and systems for smart contracts for security and filtering, Issued November 8, 2022

[8] 11,483,622 Hybrid blockchains and streamchains using non-crypto hashes for securing audio-, video- image-, and speech-based transactions and contracts, Issued October 25, 2022

[9] 11,379,612 Method and system for securing cloud storage and databases from insider threats and optimizing performance, Issued July 5, 2022

[10] 11,316,933 Service meshes and smart contracts for zero-trust systems, Issued April 26, 2022

[11] 11,316,690 Blockchain token-based cloud orchestration architecture for discrete virtual network instances, Issued April 26, 2022

[12] 11,314,695 Method and system for real-time collaboration and annotation-based action creation and management, Issued April 26, 2022

[13] 11,283,865 Service meshes and smart contracts for zero-trust systems, Issued March 22, 2022

[14] 11,250,394 Method and system for blockchain-based gemstone ownership, identity, custody, supply-chain transfer, trading, and secure payments, Issued February 15, 2022

[15] 11,226,938 Method and system for real-time collaboration and event linking to documents, Issued January 18, 2022

[16] 11,223,877 Hybrid blockchains and streamchains using non-crypto hashes for securing audio-, video-, image-, and speech-based transactions and contracts, Issued January 11, 2022

[17] 11,222,331 Method and system for blockchain-based gemstone ownership, identity, custody, supply-chain transfer, trading, and secure payments, Issued January 11, 2022

[18] 11,212,268 Method and system for identity and access management for blockchain interoperability, Issued December 28, 2021

[19] 11,080,240 Method and system for real-time collaboration and annotation-based action creation and management, Issued August 3, 2021

[20] 11,074,650 Method and system for blockchain-based gemstone ownership, identity, custody, supply-chain transfer, trading, and secure payments, Issued July 27, 2021

[21] 10,983,768 Method and system for persistent helpers for functions as a service (FAAS) in cloud computing environments, Issued April 20, 2021

[22] 10,853,772 Method and system for exchange of value or tokens between blockchain networks, Issued December 1, 2020

[23] 10,579,643 Method and system for tuning blockchain scalability, decentralization, and security for fast and low-cost payment and transaction processing, Issued March 3, 2020

[24] 10,503,927 Method and system for securing cloud storage and databases from insider threats and optimizing performance, Issued December 10, 2019

[25] 10,460,283 Smart contract optimization for multiparty service or product ordering system, Issued October 29, 2019

[26] 10,459,946 Method and system for tuning blockchain scalability, decentralization, and security for fast and low-cost payment and transaction processing, Issued October 29, 2019

[27] 10,402,589 Method and system for securing cloud storage and databases from insider threats and optimizing performance, Issued September 3, 2019

[28] 10,394,845 Method and system for tuning blockchain scalability for fast and low-cost payment and transaction processing, Issued August 27, 2019

[29] 10,289,631 Method and system for tuning blockchain scalability for fast and low-cost payment and transaction processing, Issued May 24, 2019

[30] 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

[31] 10,243,743 Tokens or crypto currency using smart contracts and blockchains, Issued March 26, 2019

[32] 10,204,339 Method and system for blockchain-based combined identity, ownership, integrity and custody management, Issued February 12, 2019

[33] 10,204,148 Method and system for tuning blockchain scalability, decentralization, and security for fast and low-cost payment and transaction processing, Issued February 12, 2019

[34] 10,121,143 Method and system for blockchain-based combined identity, ownership, integrity and custody management, Issued November 6, 2018

[35] 10,102,526 Method and system for blockchain-based combined identity, ownership, integrity and custody management, Issued October 16, 2018

[36] 10,102,265 Method and system for tuning blockchain scalability for fast and low-cost payment and transaction processing, Issued October 16, 2018

[37] 9,935,772 Methods and systems for operating secure digital management aware applications, Issued April 3, 2018

[38] 9,769,213 Method and system for secure digital object management, Issued September 19, 2017

8 *International Journal of Electronic Commerce Studies*

Table 3. Patent by assignee

Applicant (Assignee)	Patents	%	Applicant (Assignee)	Patents	%
IBM	47	14.0%	Wells Fargo Bank	4	1.2%
Accenture Global Solutions	28	8.4%	Alibaba	3	0.9%
Bank of America	24	7.2%	Dell	3	0.9%
Capital One Services	12	3.6%	The Bank Of New York Mellon	3	0.9%
Mastercard	11	3.3%	The Toronto-Dominion Bank	3	0.9%
Guardtime IP Holdings Limited	8	2.4%	Verizon Patent And Licensing	3	0.9%
Madisetti Vijay K.	8	2.4%	Winklevoss I.P.	3	0.9%
Black Gold Coin, Inc.	7	2.1%	SAP	2	0.6%
Cisco	7	2.1%	Sony	2	0.6%
Acronis International	5	1.5%	Stampery	2	0.6%
Blockchain Asics	5	1.5%	Uipco	2	0.6%
Tran Bao	5	1.5%	Vmware	2	0.6%
Intel	4	1.2%	Walmart Apollo	2	0.6%
Northern Trust	4	1.2%	Wiig Rex	2	0.6%
Shocard	4	1.2%	Xage Security	2	0.6%

Ranked #8 in the list of issued US patents in the area of blockchain

Ranking in the area of US patents issued in the area of blockchain technology in 2020

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 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.

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

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.

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.;
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 Protocols,
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.

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

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.

65. A. Bahga, V. Madisetti, "**A Blockchain Platform for Industrial Internet of Things**", *Journal of Software Engineering and Applications, Vol 9, No. 10, October 2016.*

66. A. Bahga, V. Madisetti, R. Madisetti, and A. Dugenske, "**Software Defined Things for Manufacturing Networks**", *Journal of Software Engineering and Applications, Vol 9, No. 9, September 2016.*

67. A. Bahga, V. Madisetti, J. Corporan, "**Result-as-a-Service (RAAS): Persistent Helper Functions in a Serverless Offering**", *Journal of Software Engineering and Applications, Vol 13, No 10*, October 2020.

68. A. Bahga, V. Madisetti, "**A Value-Token Transfer Protocol (VTTP) for Decentralized Finance"**, *Journal of Software Engineering and Applications, Vol 13, No. 11*, February 2020

69. V. Madisetti, S. Panda, "**A Dynamic Leader Election Algorithm for Decentralized Networks**", *Journal of Transportation Technologies, Vol 11, No 3, July 2021*

70. M. Mohapatra, A. Phukan, V. K. Madisetti, "**Generative Adversarial Network Based Approach Towards Synthetically Generating Insider Threat Scenarios**, *Journal of Software Engineering*, Vol 16, No. 11, November 2023.

71. Z. Wase, V. K. Madisetti, A. Bahga, "**Object Detection Meets LLMs: Model Fusion for Safety and Security***, Journal of Software Engineering,* Vol 16, No 12, December 2023

72. T. Singh, H. Aditya, V. Madisetti, A. Bahga, **Whispered Tuning: Data Privacy Preservation In Fine-Tuning LLMs through Differential Privacy**, *Journal of Software Engineering*, Vol 17, No. 1, January 2024.

73. G. Dhingra, S. Chawla, V. K. Madisetti, A. Bahga, **Smaller & Smarter: Score-Driven Network Chaining of Smaller Language Models,"** *Journal of Software Engineering*, Vol 17, No. 1, January 2024

74. P. Rai, S. Sood, V. K. Madisetti, A. Bahga, "**GUARDIAN: A Multi-Tiered Defense Architecture for Thwarting Prompt Injection Attacks on LLMs**", *Journal of Software Engineering*, Vol 17, No 1, January 2024.

75. A. Shankar, V. Madisetti, **A Framework for Cybersecurity Alert Distribution and Response Network (ADRIAN)**, Journal of Software Engineering and Applications, Vol 17, No. 5, 2024.

76. X. Li, Vijay K. Madisetti, **ERAD: Enhanced Ransomware Attack Defense System for Healthcare Organizations**, Journal of Software Engineering and Applications, Vol 17, No. 5, 2024.

77. P. Kumar, Vijay K. Madisetti, **Sher: A Secure Broker for DevSecOps and CI/CD Workflows**, Journal of Software Engineering and Applications, Vol 17, No. 5, 2024.

78. M. Jaikanth, Vijay K. Madisetti, **A Comparative Analysis of Cybersecurity Threat Taxonomies for Healthcare Organizations,** Journal of Software Engineering and Applications, Vol 17, No. 5, 2024.

79. Y. Tan, Vijay K. Madisetti, **User Profile & Attitude Analysis Based on Unstructured Social Media and Online Activity**, Journal of Software Engineering and Applications, Vol 17, No. 6, 2024.

80. K. Bhatnagar, Vijay Madisetti, **Certis: Cloud Asset Management & Threat Evaluation Using Behavioral Fingerprinting at Application Layer**, Journal of Software Engineering and Applications, Vol 17, No. 6, 2024.

81. I. Edlabadkar, Vijay K. Madisetti, **Cybersecurity Risk Management through Behavior-Based Contextual Analysis of Online Logs,** Journal of Software Engineering and Applications, Vol 17, No. 6, 2024.

82. J. Delugio, Vijay K. Madisetti, **Enhanced Memory-Safe Linux Security Modules (eLSMs) for Improving Security of Docker Containers for Data Centers,** Journal of Software Engineering and Applications, Vol 17, No. 5, 2024.

83. A. Biju, V. Ramesh, Vijay K. Madisetti, **Security Vulnerability Analyses of Large Language Models (LLMs) through Extension of the Common Vulnerability Scoring System (CVSS) Framework**, Journal of Software Engineering and Applications, Vol 17, No. 5, 2024.

84. S. Madikeri, Vijay K. Madisetti, **Ad Blockers & Online Privacy: A Comparative Analysis of Privacy Enhancing Technologies (PET),** Journal of Software Engineering and Applications, Vol 17, No. 5, 2024.

85. M. Manikandawamy, Vijay K. Madisetti, **Design & Test of an Advanced Web Security Analysis Tool (AWSAT),** Journal of Software Engineering and Applications, Vol 17, No. 5, 2024.

86. H. Aditya, Vijay Madisetti, et al, **Evaluating Privacy Leakage and Memorization Attacks on Large Language Models (LLMs) in Generative AI Applications,** Journal of Software Engineering and Applications, Vol 17, No. 5, 2024.

Peer Reviewed Conference Publications

1. **Dynamically-reduced complexity implementation of echo cancelers**
   Madisetti, V.; Messerschmitt, D.; Nordstrom, N.;
   Acoustics, Speech, and Signal Processing, IEEE International Conference on ICASSP '86.,Volume: 11, Apr 1986

2. **Seismic migration algorithms using the FFT approach on the NCUBE multiprocessor**
   Madisetti, V.K.; Messerschmitt, D.G.;
   Acoustics, Speech, and Signal Processing, 1988. ICASSP-88., 1988 International Conference on, 11-14 April 1988

3. **Seismic migration algorithms on multiprocessors**
   Madisetti, V.K.; Messerschmitt, D.G.;
   Acoustics, Speech, and Signal Processing, 1988. ICASSP-88., 1988 International Conference on, 11-14 April 1988
   Pages:2124 - 2127 vol.4

4. **WOLF: A rollback algorithm for optimistic distributed simulation systems**
   Madisetti, V.; Walrand, J.; Messerschmitt, D.;
   Simulation Conference Proceedings, 1988 Winter, December 12-14, 1988
   Pages:296 – 305

5. **Efficient distributed simulation**
   Madisetti, V.; Walrand, J.; Messerschmitt, D.;
   Simulation Symposium, 1989. The 22nd Annual, March 28-31, 1989
   Pages:5 - 6

6. **High speed migration of multidimensional seismic data**
   Kelley, B.; Madisetti, V.;
   Acoustics, Speech, and Signal Processing, 1991. ICASSP-91., 1991 International Conference on, 14-17 April 1991
   Pages:1117 - 1120 vol.2

7. **Performance of a fast analog VLSI implementation of the DFT**
   Buchanan, B.; Madisetti, V.; Brooke, M.;
   Circuits and Systems, 1992., Proceedings of the 35th Midwest Symposium on, 9-12 Aug. 1992
   Pages:1353 - 1356 vol.2

8. **Task scheduling in the Georgia Tech digital signal multiprocessor**
   Curtis, B.A.; Madisetti, V.K.;
   Acoustics, Speech, and Signal Processing, 1992. ICASSP-92., 1992 IEEE International Conference on, Volume: 5, 23-26 March 1992
   Pages:589 - 592 vol.5

9. **The fast discrete Radon transform**
   Kelley, B.T.; Madisetti, V.K.;
   Acoustics, Speech, and Signal Processing, 1992. ICASSP-92., 1992 IEEE International Conference on, Volume: 3, 23-26 March 1992
   Pages:409 - 412 vol.3

10. **Yield-based system partitioning strategies for MCM and ASEM design**
    Khan, S.; Madisetti, V.;
    Multi-Chip Module Conference, 1994. MCMC-94, Proceedings., 1994 IEEE,15-17 March 1994
    Pages:144 – 149

11. **Multitrack RLL codes for the storage channel with immunity to intertrack interference**
    Lee, J.; Madisetti, V.K.;
    Global Telecommunications Conference, 1994. GLOBECOM '94. 'Communications: The Global Bridge'., IEEE, Volume: 3 , 28 Nov.-2 Dec. 1994
    Pages:1477 - 1481 vol.3

12. **A parallel mapping of backpropagation algorithm for mesh signal processor**
    Khan, S.A.; Madisetti, V.K.;
    Neural Networks for Signal Processing [1995] V. Proceedings of the 1995 IEEE Workshop, 31 Aug.-2 Sept. 1995
    Pages:561 – 570

13. **Virtual prototyping of embedded DSP systems**
    Madisetti, V.K.; Egolf, T.; Famorzadeh, S.; Dung, L.-R.;
    Acoustics, Speech, and Signal Processing, 1995. ICASSP-95., 1995 International Conference on, Volume: 4 , 9-12 May 1995
    Pages:2711 - 2714 vol.4

14. **Assessing and improving current practice in the design of application-specific signal processors**
    Shaw, G.A.; Anderson, J.C.; Madisetti, V.K.;
    Acoustics, Speech, and Signal Processing, 1995. ICASSP-95., 1995 International Conference on ,Volume: 4 , 9-12 May 1995
    Pages:2707 - 2710 vol.4

15. Introduction to ARPA's RASSP initiative and education/facilitation program
Corley, J.H.; Madisetti, V.K.; Richards, M.A.;
Acoustics, Speech, and Signal Processing, 1995. ICASSP-95., 1995 International Conference on, Volume: 4, 9-12 May 1995
Pages:2695 - 2698 vol.4

16. DSP design education at Georgia Tech
Madisetti, V.K.; McClellan, J.H.; Barnwell, T.P., III;
Acoustics, Speech, and Signal Processing, 1995. ICASSP-95., 1995 International Conference on, Volume: 5 , 9-12 May 1995
Pages:2869 - 2872 vol.5

17. Rapid prototyping of DSP systems via system interface module generation
Famorzadeh, S.; Madisetti, V.K.;
Acoustics, Speech, and Signal Processing, 1996. ICASSP-96. Conference Proceedings., 1996 IEEE International Conference on, Volume: 2 , 7-10 May 1996
Pages:1256 - 1259 vol. 2

18. Rapid prototyping of DSP chip-sets via functional reuse
Romdhane, M.S.B.; Madisetti, V.K.;
Acoustics, Speech, and Signal Processing, 1996. ICASSP-96. Conference Proceedings., 1996 IEEE International Conference on ,Volume: 2 , 7-10 May 1996
Pages:1236 - 1239 vol. 2

19. A constructive deconvolution procedure of bandpass signals by homomorphic analysis
Marenco, A.L.; Madisetti, V.K.;
Geoscience and Remote Sensing Symposium, 1996. IGARSS '96. 'Remote Sensing for a Sustainable Future.', International, Volume: 3, 27-31 May 1996
Pages:1592 - 1596 vol.3

20. BEEHIVE: an adaptive, distributed, embedded signal processing environment
Famorzadeh, S.; Madisetti, V.; Egolf, T.; Nguyen, T.;
Acoustics, Speech, and Signal Processing, 1997. ICASSP-97., 1997 IEEE International Conference on, Volume: 1, 21-24 April 1997
Pages:663 - 666 vol.1

21. Target detection from coregistered visual-thermal-range images
Perez-Jacome, J.E.; Madisetti, V.K.;
Acoustics, Speech, and Signal Processing, 1997. ICASSP-97., 1997 IEEE

International Conference on, Volume: 4, 21-24 April 1997
Pages:2741 - 2744 vol.4

22. Variable block size adaptive lapped transform-based image coding
Klausutis, T.J.; Madisetti, V.K.;
Image Processing, 1997. Proceedings., International Conference on ,Volume: 3 , 26-29 Oct. 1997
Pages:686 - 689 vol.3

23. A Rate 8/10 (0, 6) MTR Code And Its Encoder/decoder
Jaejin Lee; Madisetti, V.K.;
Magnetics Conference, 1997. Digests of INTERMAG '97., 1997 IEEE International, 1-4 April 1997
Pages:BS-15 - BS-15

24. VHDL models supporting a system-level design process: a RASSP approach
DeBardelaben, J.A.; Madisetti, V.K.; Gadient, A.J.;
VHDL International Users' Forum, 1997. Proceedings, 19-22 Oct. 1997
Pages:183 – 188

25. A performance modeling framework applied to real time infrared search and track processing
Pauer, E.K.; Pettigrew, M.N.; Myers, C.S.; Madisetti, V.K.;
VHDL International Users' Forum, 1997. Proceedings, 19-22 Oct. 1997
Pages:33 – 42

26. System design and re-engineering through virtual prototyping: a temporal model-based approach
Khan, M.H.; Madisetti, V.K.;
Signals, Systems & Computers, 1998. Conference Record of the Thirty-Second Asilomar Conference on, Volume: 2 , 1-4 Nov. 1998
Pages:1720 - 1724 vol.2

27. Web-Enabled Information Appliances for Broadband Residential Networks*", F. Ahmed, V. Madisetti, Y. Jiao, V. Dasigi,* Yamacraw IAB Presentation, 2000. Atlanta, GA

28. Web-Enabled Transcoding for Broadband Residential Networks (BRAN), *M. Rahim, V. Madisetti, K. Naik, V. Dasigi*, Yamacraw IAB Presentation, 2000, Atlanta, GA.

29. Enforcing Interdependencies and Executing Transactions Atomically Over Autonomous Mobile Data Stores Using SyD Link Technology, *S. K. Prasad, V. Madisetti, et al,* IEEE International Conference on Distributed Computing, 2003.

30. A debugger RTOS for embedded systems
Akgul, T.; Kuacharoen, P.; Mooney, V.J.; Madisetti, V.K.;
Euromicro Conference, 2001. Proceedings. 27th, 4-6 Sept. 2001
Pages:264 - 269

31. Adaptability, extensibility and flexibility in real-time operating systems
Kuacharoen, P.; Akgul, T.; Mooney, V.J.; Madisetti, V.K.;
Digital Systems, Design, 2001. Proceedings. Euromicro Symposium on, 4-6 Sept. 2001
Pages:400 – 405

32. Effect of handoff delay on the system performance of TDMA cellular systems
Turkboylari, M.; Madisetti, V.K.;
Mobile and Wireless Communications Network, 2002. 4th International Workshop on, 9-11 Sept. 2002
Pages:411 – 415

33. Enforcing interdependencies and executing transactions atomically over autonomous mobile data stores using SyD link technology
Prasad, S.K.; Bourgeois, A.G.; Dogdu, E.; Sunderraman, R.; Yi Pan; Navathe, S.; Madisetti, V.;
Distributed Computing Systems Workshops, 2003. Proceedings. 23rd International Conference on, 19-22 May 2003
Pages:803 – 809

34. Performance evaluation and optimization of SCTP in wireless ad-hoc networks
Argyriou, A.; Madisetti, V.;
Local Computer Networks, 2003. LCN '03. Proceedings. 28th Annual IEEE International Conference on, 20-24 Oct. 2003
Pages:317 - 318

35. Implementation of a calendar application based on SyD coordination links
Prasad, S.K.; Bourgeois, A.G.; Dogdu, E.; Sunderraman, R.; Yi Pan; Navathe, S.; Madisetti, V.;
Parallel and Distributed Processing Symposium, 2003. Proceedings. International, 22-26 April 2003
Pages:8 pp.

36. Bandwidth aggregation with SCTP
Argyriou, A.; Madisetti, V.;
Global Telecommunications Conference, 2003. GLOBECOM '03. IEEE Volume: 7 , 1-5 Dec. 2003
Pages:3716 - 3721 vol.7

37. Software streaming via block streaming
Kuacharoen, P.; Mooney, V.J.; Madisetti, V.K.;
Design, Automation and Test in Europe Conference and Exhibition, 2003
Pages:912 – 917

38. Frequency-dependent space-interleaving for MIMO OFDM systems
Mohajerani, P.; Madisetti, V.K.;
Radio and Wireless Conference, 2003. RAWCON '03. Proceedings , Aug. 10-13, 2003
Pages:79 - 82

39. A media streaming protocol for heterogeneous wireless networks
Argyriou, A.; Madisetti, V.;
Computer Communications, 2003. CCW 2003. Proceedings. 2003 IEEE 18th Annual Workshop on, 20-21 Oct. 2003
Pages:30 – 33

40. Realizing load-balancing in ad-hoc networks with a transport layer protocol
Argyriou, A.; Madisetti, V.;
Wireless Communications and Networking Conference, 2004. WCNC. 2004 IEEE, Volume: 3, 21-25 March 2004
Pages:1897 - 1902 Vol.3

41. Streaming H.264/AVC video over the Internet
Argyriou, A.; Madisetti, V.;
Consumer Communications and Networking Conference, 2004. CCNC 2004. First IEEE, 5-8 Jan. 2004
Pages:169 – 174

Other Publications

1. **A Transport Layer Technology for Improving the QoS of Networked Multimedia Applications <draft-madisetti-arguriou-qos-sctp-00.txt).**
Madisetti, V., Argyriou, A.
IETF Internet-Draft, Jul 25, 2002.

2. **Voice & Video over Mobile IP Networks <draft-madisetti-argyriou-voice-video-mip-00.txt>**
Madisetti, V., Argyriou, A.
IETF Internet-Draft, Nov 20, 2002.

3. **Enhancements to ECRTP with Applications to Robust Header Compression for Wireless Applications**. **<draft-madisetti-rao-suresh-rohc-00.txt>**
   Madisetti, V.; Rao, S., Suresh, N.
   IETF Internet-Draft, June 30, 2003.

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

   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
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. Now at Samsung

21. **Antonios Argyriou, 2005**, Research Scientist, Philips

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

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

24. **A. Yusuf, 2013, Professor,** National University, Pakistan

25. **Joel Corporan**, **2023**, Senior Scientist, Warner Media, USA

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

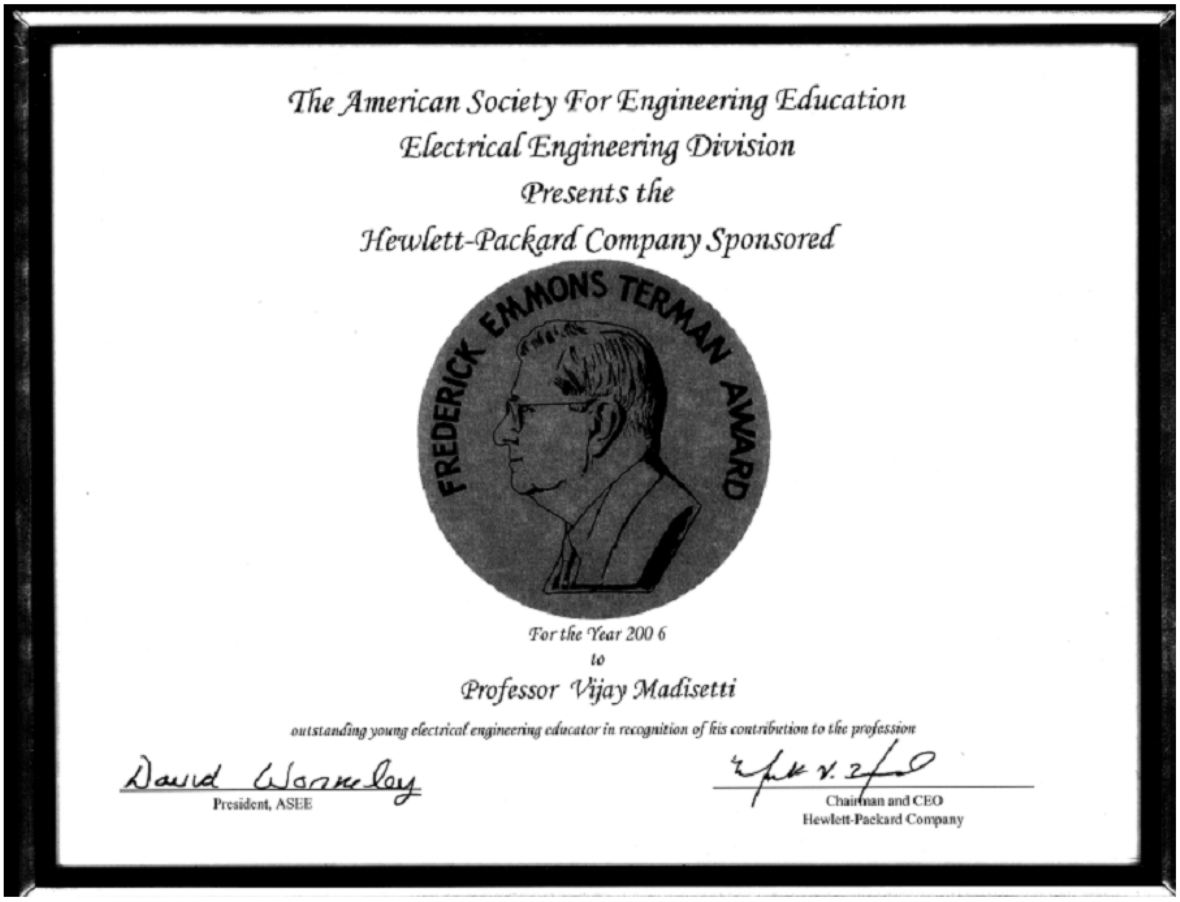
8. **NSF RI Award**, 1990

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

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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Patent	Date	Description
2843	2004	Method and Apparatus for Improving the Performance of Wireless LANs
2825	2003	Method and Apparatus for Optimal Partitioning and Ordering of Antennas for Layered Space-Time Block Codes in MIMO Communications Systems
2815	2003	How to Rapidly Develop a SyD Application
GSU-023	2003	Rapid Development of SyD Applications
2810	2003	System on Mobile Devices Middleware Design
2718	2003	A Transport Layer Algorithm for Improved Anycast Communication
2717	2003	A Novel Transport Layer Load-Balancing Algorithm
2716	2003	A Transport Layer QoS Algorithm
2715	2003	A Novel Transport Layer Algorithm for MPLS Performance
2659	2002	A New Algorithm and Technology for Implementing Mobile IP with Applications to Voice and Video over Mobile IP
2656	2002	Debugging with Instruction-Level Reverse Execution
2655	2002	Embedded Software Streaming

2539		System of Databases: An Enabling Technology for Programming
2517	2002	A Dynamic Instantiated Real-Time Operating System Debugger
2516	2002	A Dynamic Real-Time Operating System
GSU-009	2001	System of Databases: Architecture,, Global Queries, Triggers and Constraints
2480	2001	Mobile Fleet Application based on SyD Technology
2479	2001	System of Databases: A model with coordination links and a calendar application
1893	1999	Beehive
1726	1995	Very High Scale Integrated Circuit Hardware Description Language Models (VHDL Models)
1401	1995	Self-Compensation Receiver (SCR)