

Dr. Vijay K. Madisetti

Fellow, IEEE

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Address:

56 Creekside Park Drive

Johns Creek, GA 30022

Employment:

- 1984-1989: Post Graduate Researcher (UC Berkeley),
- 1989-present: Full Professor of Electrical & Computer Engineering (**Georgia Tech, Atlanta, GA 30332**).

Areas of Technical Interest – Wireless & Mobile Communications, Computer Engineering, Digital Signal Processing, Wireless Networks, Computer Networks, Software Systems, Control Systems, Cloud Computing.

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.com>

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 (2010-2016) With Testimony

Case Name: Mformation v. Research in Motion:

Case No: 5:08-cv-04990-JW (N.D. of California)

Expert for Mformation

(Mobile Device Management: 2010-2012)

Testified at Trial

Case Name: HTC v. IPCOM –

Case No: 1:2008-cv-01897 (District of Columbia)

Expert for IPCOM.

(3G Standards: 2009 – 2012)

Testified by deposition

Case Name: Apple v. Kodak

Case No. ITC 337-TA-717 (ITC)

Expert for Kodak

(Digital Image Processing & UI: 2008-2011)

Testified at trial

Case Name: Harkabi v. Sandisk,

Case No: 1:08-cv-08203-WHP

Expert for Harkabi

(Digital Rights Management for Flash Devices: 2010-2012)

Testified at trial

Case Name: Yangaroo Inc. v. Destiny Media Technologies, Inc.

Case No: 09-C-0462

Expert for Yangaroo.

(Digital Rights Management Streaming: 2010-2011)

Testified by deposition

Case Name: Motorola v. Microsoft,

Case No: ITC 337-TA-752

Expert for Motorola

(Peer to Peer Gaming: 2011-2013)

Testified at trial

Case Name: Motorola v. Apple,

Case No: ITC 337-TA-745

Expert for Motorola

(Mobile Applications & UI: 2011-2012)

Testified at trial

Case Name: Innovative Sonic Ltd. vs. RIM

Case No: 3:11-cv-00706-K-BF

Expert for Innovative Sonic Ltd

(3G Standards – Encryption, HSDPA: 2010-2013)

Testified at trial

Case Name: Interdigital v. ZTE, Huawei, Nokia (JDA)

Case No: ITC 337-TA-800

Expert for JDA

(3G Standards – HSDPA: 2012-2013)

Testified at trial

Case Name: Kodak v. Apple, HTC

Case No: ITC 337-TA-831

Expert for Kodak

(Digital Image Processing & UIs: 2011-2012)

Submitted reports

Case Name: Calypso v. T-Mobile

Case No: 2:08-CV-441-JRG-RSP

Expert for T-Mobile

(Unified Communications: 2012-2013)

Testified by deposition

Case Name: TracBeam v. AT&T

Case No: 6:11-cv-00096-LED

Expert for AT&T

(GPS Services: 2011-2012)

Testified by deposition

Case Name: BT v. Cox/Comcast

Case No: 10-658 (SLR) Delaware

Expert for Cox and Comcast

(VOIP, Network Management: 2012-2014)

Testified by deposition

Case Name: Ericsson v. Samsung

Case No: 337-TA-862 (ITC)

Expert for Ericsson

(RF Receivers, EDGE Standards: 2012- 2013)

Testified at trial

Case Name: IPR – ContentGuard v. ZTE

Expert for ZTE

(DRM for Digital Devices: 2012-2014)
Testified by deposition

Case Name: Emblaze v. Apple

Case No: 5:11-cv-01079-PSG
Expert for Emblaze
(Digital Video/Audio Streaming: 2012-2014)
Testified at trial

Case Name: Emblaze v. Microsoft

Case No: 3:12-cv-05422-JST
Expert for Emblaze
(Digital Video/Audio Streaming: 2012 - Present)
Ongoing

Case Name: MMI v. RIM

Case No: 2:10-cv-00113-TJW-CE
Expert for MMI
(Area: Mobile Devices/User Interfaces: 2012- 2013)
Testified by deposition

Case Name: Wi-LAN v. Apple

Case No: 13-cv-0790 DMS
Expert for Wi-LAN
(Area: 4G/3G Wireless Communications: 2013 – 2015)

Testified by Deposition

Case Name: Sentius LLC v. Microsoft

Case No: 5:13-cv-00825-PSG
Expert for Sentius
(Area: Enterprise Software Systems: 2014-2015)

Testified by deposition

Case Name: Medius Eagle Harbor v. Ford

Case No: 3:1-cv-05503-BHS
Expert for Medius Tech
(Area: Automotive Multimedia Systems: 2014-)

Testified at Trial

Genband US LLC v. Metaswitch Networks

No 2:14-cv-33 (ED Texas Marshall)
Expert for Metaswitch Networks
Technology: Voice & Data Over IP Networks (2014-2015)

Submitted declarations & deposition

Enterprise - Systems Technologies S.a.r.l v. Samsung Electronics Co. Ltd

Case No: 6:14-cv-555-MHS and ITC Inv. No. 337-TA-925

Expert for Samsung

Technology: Android Operating System (2014-2015)

Testified by deposition

Ericsson Inc. v. Apple Inc.

Case No: 2:15-cv-287 (ED Texas) and ITC-337-952/953

Expert for Ericsson

Technology: 4G Wireless Systems (2015 – present)

Testified by deposition & Trial

Intellectual Ventures LLC v. Motorola Mobility LLC (Google)

Case No: 13-cv-61358-RST (SD Florida)

Expert for Google

Technology: Wireless Systems (2013- present)

Testified by deposition (IPR)

Intellectual Ventures LLC v. Nikon Corp

C.A No. 11-1025-SLR (Delaware)

Expert for Nikon

Technology: Wireless Systems (WiFi) (2014-2015)

Submitted declarations

Masimo v. Mindray Biomedical Electronics Co.

Case No: SACV-12-02206 CJC (JPRx) C. D. California

8:12-cv-02206-CJC-JPR

Expert for Masimo

Technology: Pulse Oximetry (2014 – present)

Submitted reports, testified by deposition

Samsung v. Nvidia

Case No: 3:14-cv-757-REP ED Virginia

Expert for Samsung

Technology: Microprocessors & Memories (2014 – present)

Submitted reports & Deposition & Trial

Chrimar v. HP/Cisco/Alcatel

Case No: 4:13-cv-1300-JSW

Expert for Chrimar
Technology: Power over Ethernet

Submitted reports & Deposition & Trial

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), Sony (US Patent 6,101,534), Kia, (US Patent 5,530,431) Fortinet (US patent 6,195,587), and ZTE (US Patent 7,523,072).

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**
Madiseti, V.K.;
Boston: MA, IEEE Press: Butterworth Heinemann, 1995, 525 pp.
2. **Quick-Turnaround ASIC Design in VHDL**
Romdhane, M., Madiseti, V.K., Hines, J.
Boston: MA, Kluwer Academic Press, 1996, 190 pp.
3. **The Digital Signal Processing Handbook (First Edition)**
Madiseti, V. K., Williams, D. (Editors)
CRC Press, Boca Raton, Fla, 1998, 2500 pp.
4. **VHDL: Electronics Systems Design Methodologies.**
Madiseti, 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)

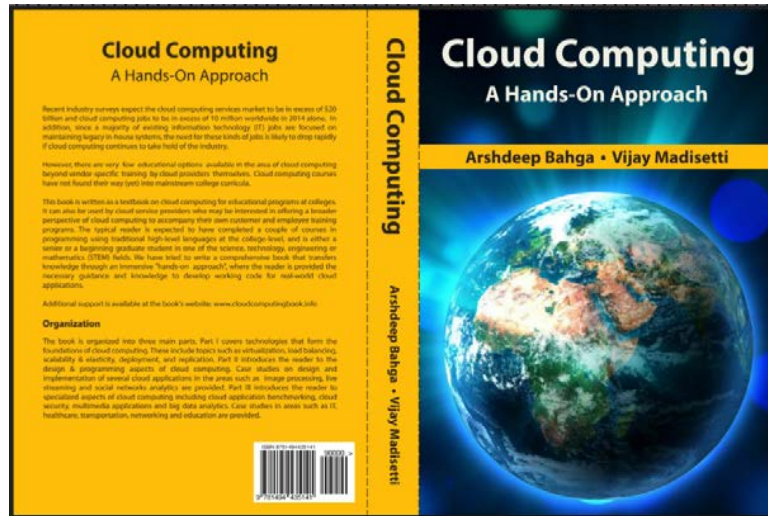
Amazon CreateSpace Publishing, 2013, 454 pp.

8. Internet of Things: A Hands-On Approach

A Bahga, V. Madisetti (2014)

Amazon CreateSpace Publishing, 2014, 450 pp.





Edited Books & Collection of Papers

- 1. Advances in Parallel & Distributed Simulation**
Madiseti, V.K.; Nicol, D., Fujimoto, R. (Editors)
San Diego, CA: SCS Press, 1991, 200 pp.
- 2. Modeling, Analysis, Simulation of Computer & Telecommunications Systems**
Madiseti, V., Gelenbe, E., Walrand, J. W. (Editors)
Los Alamitos: CA, IEEE Computer Society Press, 1994, 425 pp.
- 3. Modeling & Simulations on Microcomputers**
Madiseti, 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)
Madiseti, 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)
Madiseti, 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

Refereed Journal Publications

- 1. Multilevel range / NEXT performance in digital subscriber loops**
Brand, G.; Madiseti, 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
- 2. Seismic migration algorithms on parallel computers**
Madiseti, 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
- 3. Asynchronous algorithms for the parallel simulation of event-driven dynamical systems**
Madiseti, V.K.; Walrand, J.C.; Messerschmitt, D.G.:
ACM Transactions on Modeling and Computer Simulation, v 1, n 3, July 1991,
Pages: 244-74
- 4. Synchronization mechanisms for distributed event-driven computation**
Madiseti, V.K.; Hardaker, D.:
ACM Transactions on Modeling and Computer Simulation, v 2, n 1, Jan. 1992,
Pages: 12-51

5. Efficient VLSI Architectures for the Arithmetic Fourier Transform (AFT)

Kelley, B.T.; Madiseti, 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

6. The fast discrete Radon transform. I. Theory

Kelley, B.T.; Madiseti, V.K.;

Image Processing, IEEE Transactions on ,Volume: 2 , Issue: 3 , July 1993

Pages:382 – 400

7. The Georgia Tech digital signal multiprocessor

Barnwell, T.P., III; Madiseti, 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

8. The MIMDIX Environment for Parallel Simulation

Madiseti, V.K.; Hardaker, D.; Fujimoto, R.M.:

Journal of Parallel and Distributed Computing, v18, no. 4, August 1993,

Pages: 473-83.

9. LMSGEN: a prototyping environment for programmable adaptive digital filters in VLSI

Romdhane, M.S.B.; Madiseti, V.K.;

Chapter in VLSI Signal Processing, VII, 1994.,

Pages:33 – 42

10. Fixed-point co-design in DSP

Egolf, T.W.; Famorzadeh, S.; Madiseti, V.K.;

Chapter in VLSI Signal Processing, VII, 1994.,

Pages:113 - 126

11. A fast spotlight-mode synthetic aperture radar imaging system

Madiseti, V.K.;

Communications, IEEE Transactions on ,Volume: 42 , Issue: 234 , February-April 1994

Pages:873 – 876

12. Rapid prototyping on the Georgia Tech digital signal multiprocessor

Curtis, B.A.; Madiseti, 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

13.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

14. 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

15. Computer Simulation of Application-Specific Signal Processing Systems

Casinovi, G.; Madisetti, V.K.;

International Journal in Computer Simulation, Vol. 4, No. 4, Nov 1994.

16. 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

17. 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

18. 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

19. 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

20. 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

21. Conceptual prototyping of scalable embedded DSP systems

Dung, L.-R.; Madiseti, V.K.;

Design & Test of Computers, IEEE ,Volume: 13 , Issue: 3 , Fall 1996
Pages:54 – 65

22. Advances in rapid prototyping of digital systems

Madiseti, V.K.; Richards, M.A.;

Design & Test of Computers, IEEE ,Volume: 13 , Issue: 3 , Fall 1996
Pages:9

23. Combined modulation and error correction codes for storage channels

Jaejin Lee; Madiseti, V.K.;

Magnetics, IEEE Transactions on ,Volume: 32 , Issue: 2 , March 1996
Pages:509 – 514

24. Model-based architectural design and verification of scalable embedded DSP systems-a RASSP approach

Dung, L.-R.; Madiseti, V.K.; Hines, J.W.;

Chapter in VLSI Signal Processing, IX, 1996.
Pages:147 – 156

25. Low-power digital filter implementations using ternary coefficients

Hezar, R.; Madiseti, V.K.;

Chapter in VLSI Signal Processing, IX, 1996.,
Pages:179 – 188

26. All-digital oversampled front-end sensors

Romdhane, M.S.B.; Madiseti, V.K.;

Signal Processing Letters, IEEE, Volume: 3 , Issue: 2 , Feb. 1996
Pages:38 – 39

27. Modeling COTS components in VHDL

Calhoun, S., Reese, R; Egolf, T., Madiseti, V.K.;

Journal of VLSI Signal Processing, Volume: 14 , Issue: 2 , Nov 1996
Pages: 24 – 31

28. VHDL-Based Rapid Systems Prototyping

Egolf, T.; Madiseti, V.K.;

Journal of VLSI Signal Processing, Volume: 14 , Issue: 2 , Nov 1996
Pages: 40-52

29. 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

30. Incorporating cost modeling in embedded-system design

Debardelaben, J.A.; Madisetti, V.K.; Gadiant, A.J.;

Design & Test of Computers, IEEE ,Volume: 14 , Issue: 3 , July-Sept. 1997

Pages:24 – 35

31. 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

**32. A case study in the development of multi-media educational material:
the VHDL interactive tutorial**

Gadiant, 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.

33. Adaptive mobility management in wireless networks

Jeongwook Kim; Madisetti, V.K.;

Electronics Letters ,Volume: 34 , Issue: 15 , 23 July 1998

Pages:1453 – 1455

34. 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

**35. 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

36. 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

37. 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

38. Reengineering digital systems

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

39. 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

40. 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

**41. 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

42. Closed-form analysis of CDMA systems using Nyquist pulse

Jatunov, L.A.; Madisetti, V. K.;
Communications Letters, IEEE (Under Revision), 2005.

**43. Systematic Design of End-to-End Wireless Mobility Management
Protocols,**

Argyriou, A.; Madisetti, V. K.;
ACM/Springer Wireless Networks (WINET), Accepted 2005.

44. 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.*

45. 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.

46. Modeling the Effect of Handoffs on Transport Protocol Performance,

Argyriou, A.; Madiseti, V. K.;
IEEE Transactions on Mobile Computing, Submitted for review in March 2005

47. Throughput Models for Transport Protocols with CBR and VBR Traffic Workloads”,

Argyriou, A.; Madiseti, V. K.;
ACM Transactions on Multimedia Computing, Communications & Applications,
Submitted for review in April 2005.

48. “Electronic System, Platform & Package Codesign”,

Madiseti, V. K.
IEEE Design & Test of Computers, Volume 23, Issue 3, June 2006. pages
220-233.

49. “The Design of an End-to-End Handoff Management Protocol”,

A. Argyriou, Madiseti, V. K.
Wireless Networks, Springer, May 2006.

50. “A Soft-Handoff Transport Protocol for Media Flows in Heterogeneous Mobile Networks ”,

A. Argyriou, Madiseti, V. K.
Computer Networks, Vol 50, Issue 11, Pages 1860-1871, August 2006.

51. “Computationally Efficient SNR Estimation for Bandlimited WCDMA Systems”

L. Jatunov, Madiseti, V. K.
IEEE Transactions on Wireless Communications, Volume 5, Issue 13,
December 2006, Pages 3480-3491.

52. “Space-Time Codes for Wireless & Mobile Applications”,

M. Sinnokrot, Madiseti, V.K.
DSP Handbook, Second Edition, 2009 (to be published)

53. A. Bahga, V. Madiseti, “Rapid Prototyping of Advanced Cloud-Based Systems”, IEEE Computer, vol. 46, no. 11, Nov 2013, pp 76-83, 2013

54. A. Bahga, V. Madiseti, “Cloud-Based Information Integration & Informatics Framework for Healthcare Applications”, IEEE Computer, February 2015.

55. A. Bahga, V. Madiseti, “A Cloud-based Approach for Interoperable EHRs”, IEEE Journal of Biomedical and Health Informatics, vol. 17, no. 5, Sep 2013, pp. 894-906, 2013

56. A. Bahga, V. Madiseti, "**Cloud-Based Information Technology Framework for Data Driven Intelligent Transportation Systems**", *Journal of Transportation Technologies*, vol.3 no.2, April 2013
57. A. Bahga, V. Madiseti, "**Performance Evaluation Approach for Multi-tier Cloud Applications**", *Journal of Software Engineering and Applications*, vol. 6, no. 2, pp. 74-83, Mar 2013.
58. Yusuf, A., V. Madiseti, "**Configuration for Predicting Travel Time Using Wavelet Packets and Support Vector Regression**", *Journal of Transportation Technologies*, vol 3, no. 3, June 2013.
59. A. Bahga, V. Madiseti, "**Analyzing Massive Machine Maintenance Data in a Computing Cloud**", *IEEE Transactions on Parallel and Distributed Systems*, vol. 23, no. 10, pp. 1831 - 1843, 2012.
60. N. Radia. Y. Zhang, M. Tatimapula, V. Madiseti, "**Next Generation Applications on Cellular Networks: Trends, Challenges, and Solutions**," *Proceedings of the IEEE*, Vol 100, Issue 4, pp. 841-854, 2012.
61. A. Bahga, V. Madiseti, "**Rapid Prototyping of Advanced Cloud-Based Systems**", *IEEE Computer*, vol. 46, no. 11, Nov 2013, pp 76-83, 2013
62. A. Bahga, V. Madiseti, "**A Cloud-based Approach for Interoperable EHRs**", *IEEE Journal of Biomedical and Health Informatics*, vol. 17, no. 5, Sep 2013, pp. 894-906, 2013
63. A. Bahga, V. Madiseti, "**Cloud-Based Information Integration & Informatics Framework for Healthcare Applications**", *IEEE Computer*, February 2015.

Peer Reviewed Conference Publications

1. **Dynamically-reduced complexity implementation of echo cancelers**
Madiseti, 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**
Madiseti, 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**
Madiseti, 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.; Madiseti, 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

Madiseti, 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.; Madiseti, 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.; Madiseti, 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

Madiseti, 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.; Madiseti, V.K.;
Acoustics, Speech, and Signal Processing, 1996. ICASSP-96. Conference
Proceedings., 1996 IEEE International Conference on , Volume: 2 , 7-10 May
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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.

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 Marengo, 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

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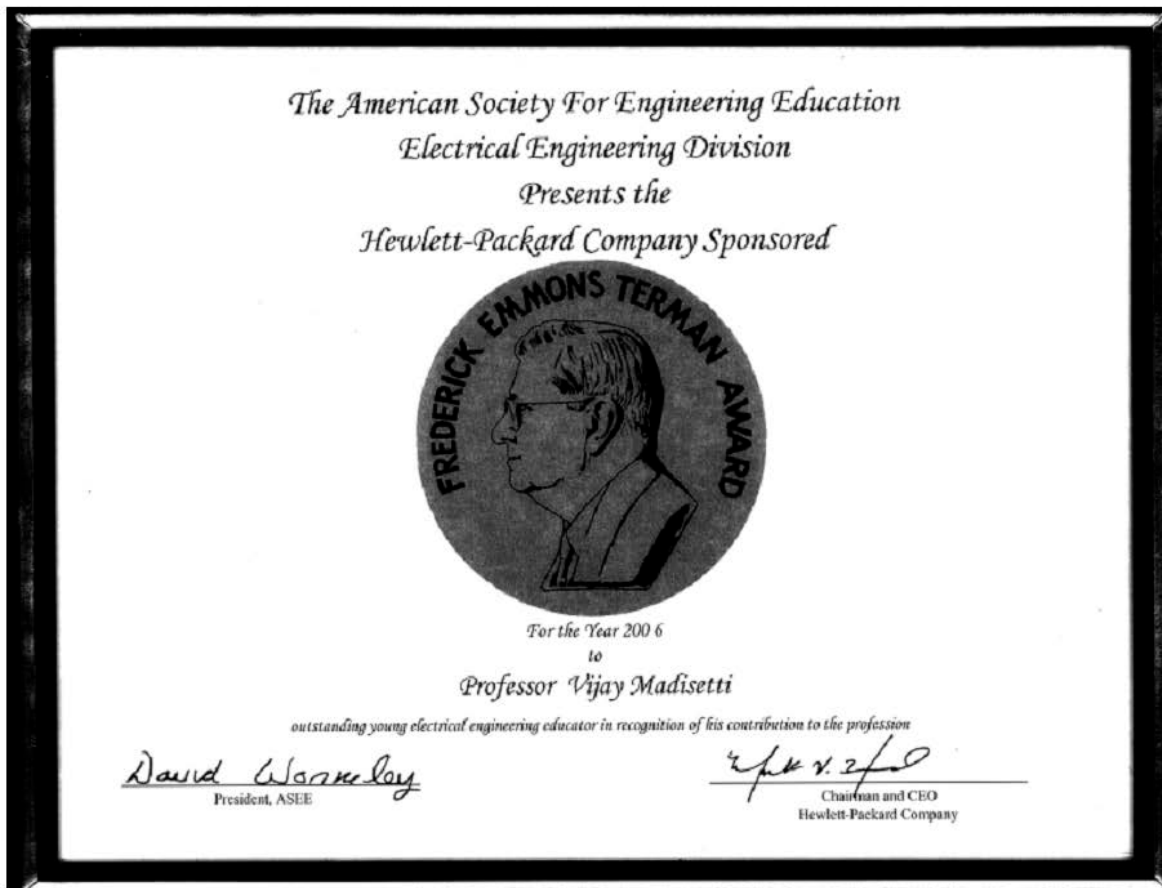
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System-on-Chip Design with UML
Professor, King Mongkut's University, Thailand.

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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
10. **Georgia Tech Outstanding Doctoral Dissertation Advisor Award**, 2001.
11. **ASEE 2006 Frederick Emmons Terman Medal**, 2006.
12. **Fellow of IEEE**



Intellectual Property Disclosures (Georgia Tech)

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2718	2003	A Transport Layer Algorithm for Improved Anycast Communication
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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)