

Curriculum Vitae
Armin R. Mikler

Professor

Department of Computer Science and Engineering
University of North Texas
mikler@cs.unt.edu

EDUCATION

Doctor of Philosophy - August 1995

Iowa State University, Ames, IA.

Major : Computer Science
Advisors : Dr. Johnny Wong and Dr. Vasant Honavar
Emphasis : Communication Networks
Dissertation : Intelligent Routing

Master of Science - December 1990

Iowa State University, Ames, IA.

Major : Computer Science
Advisor : Dr. Johnny Wong
Emphasis : Communication Networks
Thesis : Secure Communication in Integrated Services Digital Networks

Diplom-Informatiker - July 1988

Fachhochschule, Darmstadt, Germany.

Major : Computer Science
Advisor : Dr. Norbert Krier
Emphasis : Systems-Programming
Thesis : Automated Remote Software Maintenance

HONORS/ AWARDS

Fulbright Scholarship - July 1986 to May 1987

Visiting Student for one Academic Year at Iowa State University, Ames, IA.

Upsilon Pi Epsilon - 1992

Honor Society in the Computing Sciences, Iowa State University Chapter.

Teaching Excellence Award - 1993

Department of Computer Science, Iowa State University, Ames, IA.

Mercator Professor – June 15 – Sept. 15, 2007

Visiting Professor at FernUniversität Hagen, Germany

'Fessor Graham Award (SGA Honors Professor) – 2011

University of North Texas, Denton, TX.

EMPLOYMENT

Research

Mercator Visiting Professor – June 15 to Sept. 15, 2007

Visiting Professor at FernUniversität Hagen, Germany

Postdoctoral Research Associate - Aug. 1995 to Aug. 1997

Scalable Computing Laboratory, Ames Laboratory,
U.S. Department of Energy, Iowa State University, Ames, IA.

Research Assistant - Sept. 1989 to May 1992

Center for Agricultural and Rural Development (CARD)
Iowa State University, Ames, IA.

Research Assistant - Aug. 1987 to Jan 1988

Fachhochschule, Darmstadt, Germany.

Teaching

Professor – May 2011 - present

Department of Computer Science and Engineering, University of North Texas, Denton, TX.
Joined Appt. in the Department of Biological Sciences, University of North Texas, Denton, TX.

Associate Professor – May 2003 – May 2011

Department of Computer Science and Engineering, University of North Texas, Denton, TX.
Joined Appt. in the Department of Biological Sciences, University of North Texas, Denton, TX.

Assistant Professor - September 1997 – May 2003

Department of Computer Sciences, University of North Texas, Denton, TX.

Adjunct Assistant Professor - Jan. 1996 to May 1997

Department of Computer Science, Iowa State University, Ames, IA.

Graduate Teaching Assistant - June 1992 to August 1995

Department of Computer Science, Iowa State University, Ames, IA.
Assistant for undergraduate and graduate courses.

Graduate Teaching Assistant - Summer, 1989

Upward Bound Program, Student Affairs, Iowa State University, Ames, IA.

Graduate Teaching Assistant - Aug. 1988 to May 1989

Department of Business Management, Iowa State University, Ames, IA.

Instructor - Sept. 1987 to June 1988

Kreisvolkshochschule, Darmstadt, Germany.

Instructor - Jan. 1984 to June 1986

Kreisvolkshochschule, Offenbach, Germany.

Technical

Electronics Technician - Jan. to Aug. 1982

Telenorma, Roedermark, Germany.

- Developed hard and software for microprocessor controlled test devices
- Built and implemented devices into production cycle for quality control

PROFESSIONAL ACTIVITIES

Research

Director of the Center for Computational Epidemiology and Response Analysis (CeCERA) at the University of North Texas, 2009 - present

Director of the Computational Epidemiology Research Laboratory (CERL) in the Department of Computer Science and Engineering, 2003 - present

Director of the Network Research Laboratory (NRL) in the Department of Computer Science, 1998 - 2008

Member of the Technical Advisory Committee (TAC) for Packet Engines Inc.

1998 - 1999. As TAC member, I have advised Engineers at Packet Engines Inc. on the use of Gigabit Ethernet Technology in an academic laboratory environment and cluster computing.

Research Associate with the Scalable Computing Laboratory at AmesLab.

August 1997 – present, continued research associate affiliation for joint research on Cluster Computing and High-Speed Networking.

Coordinator of the Agent Research Group (ARG) in the Department of Computer Science.

This group represents a forum for research in the area on intelligent mobile agents.

Member of the Institute of Applied Science at UNT. 2000 – present. Collaborative development of Interdisciplinary Research Proposals

Service

University Committees:

Faculty Senator. September 2005 – 2009

Faculty Senate Committee on Committees, September 2005 – 2006

Faculty Senate Committee on Faculty Participation on Governance, January 2006 - 2009

Member of the Communications Planning Group at UNT. November 1998 – 2004

Member and Chair of the Research Computing Planning Group at UNT. November 1998 - 2004

Co-PI for UNT's Internet-2 Initiative and NSF Funding Effort. November 1998 – 2000.

HPC Planning Committee, Fall 2008 – 2009

Graduate Appeals Committee, 2008 – 2010

HPC Advisory Committee, Fall 2009 – present

Member of the Graduate Council, Fall 2008 - 2010

President's Council on Diversity, Fall 2011 - present

College Committees(CAS):

Member of the Undergraduate Curriculum Committee. September 1999 – 2003

College Committees(CENG):

Coordinator for the Cluster on Computational Life Science, 2010 - present

BEE Planning Committee, Fall 2006 – Spring 2008

College Charter Committee, Fall 2007 – Spring 2008

College Curriculum Committee, Fall 2005 – Summer 2009

Department of Computer Science:

Associate Department Chair, September 2009 - present

Chair of the Graduate Committee. September 2005 – 2009

PAC-CoChair, September 2006 - 2007

PAC and PT Committee member, September 2003 - present

Faculty Search Committee Chair. September 2000 – 2003

Member of the Executive Committee. September 1998 – 2003, 2005 - 2009

Member of the Graduate Committee. September 1997 – 2002, 2005 - 2010

Member of the Undergraduate Committee. September 2002 – 2003

Member of the ad hoc Computer Advisory Committee. Summer 1998 - 2002

Colloquium Coordinator. September 1997 – 2001

Member of the Chair Search Committee, Fall 2009 - 2010

Other Departments:

Member of the Computational Life Science Cluster Search Committee. Spring 2011 – present
Member of the iARTA Cluster Search Committee. Fall 2011 – present
Member of the BioInformatics Search Committee in Biology. September 2008 – Summer 2010
Member of the Chair Search Committee in MEE, Fall 2009 – Summer 2010

Conference Committees

- IASTED Conference on Artificial Intelligence and Soft Computing 1997, 1998, 1999.
- Workshop on Distributed Computing on the WEB 1998, 1999, 2000, 2001
- High Performance Computing '99 [HPC 99] Special Session on "Adaptive and Intelligent Computing Systems"
- High Performance Computing '2000, 2001, 2002
- 7th International Conference on Telecommunication Systems and Modeling, 1999 - present.
- The First ACM/IEEE International Workshop on Wireless and Mobile Multimedia (WoWMoM'98)
- Supercomputing Conference SC2000 in Dallas Tx, November 2000.
- Innovative Internet Computing Systems (I²CS), 2001, 2002, 2003, 2004, 2006, 2007, 2009, 2010, 2011
- Design, Analysis, and Simulation of Distributed System – DASD 2003 in Orlando.
- IEEE COMPSAC 2006, 2007
- IEEE GrC 2006 – Atlanta
- IEEE CIT2006 – Orrisa, India 2006
- IJCBS 2009 – Shanghai 2009
- ACM-BCB 2010 **Program co-chair**
- ACM-BCB 2011
- Supercomputing Conference SC2010 in New Orleans, November 2010, Poster Committee

Proposal

Review Panels

National Science Foundation (NSF), Panel Review 2001, 2003, 2004, 2008, 2011
North Atlantic Treaty Organization (NATO) - Collaborative Research Grants. Sep. 1997

Other

Associate Editor for the Journal "Telecommunication Systems – Modeling, Analysis, Design and Management" published by J.C. Balzer AG, Basel, Switzerland. Bezael Gavish, Editor in Chief. (July 2000 – August 2010)

Secretary and Treasurer for the ACM Special Interest Group on Bioinformatics and Computational Biology – **SIGBioinformatics**, newly established in 2010.

Referee for Journal:

- The Journal of Systems and Software
- Journal of Parallel Distributed Computing (JPDC)
- IEEE Transactions on Knowledge and Data Engineering
- IEEE/ACM Transaction on Networking
- Artificial Life
- Simulation

Affiliations

Association for Computing Machinery (ACM), member since 1989
IEEE Computer Society, member since 1990 - 2006
IEEE, student member 1990-1996
IEEE Communication Society, member 1990-1996
Internet Society, member 1992-1996

TEACHING & RESEARCH

Research Interests

- Computational Epidemiology (Modeling/Simulation of infectious disease outbreak)
- Analysis and Optimization of Bio-Emergency Response Plans
- Intelligent Agents and Multi-Agent Systems
- Heuristic and Biologically Inspired Approaches for Coordinating Agents
- Agent-Based Modeling and Simulation
- Bio Informatics, Health Informatics, Environmental Informatics
- Service Assurance and Security in Networks / Distributed Systems
- Tools and Middleware for Distributed and Collaborative Computing Environments (i.e. Grid)
- Intelligent Traffic Management in Large Communication Networks

Teaching Interests

Graduate Level

- Computation Life Science
- Computational Epidemiology
- Biocomputing/Bioinformatics
- Operating Systems
- Distributed Systems
- Agent-Based Systems

Undergraduate Level

- Principles of Operating Systems
- Systems Programming
- Bio-Computing/Bioinformatics
- Computational Life Science
- Scientific Computing
- Computational Epidemiology

Courses Taught

Undergraduate (1997 – 2011):

- CSCI 3100 - Computer Organization
- CSCI 3600 - Systems Programming
- CSCI 3780 - Data Communication
- CSCI 3780 - Computer Networks
- CSCI 4330 - UNIX and TCP/IP Programming
- CSCI 4330 - TCP/IP
- CSCI 4330 – Intelligent Mobile Agents
- CSCE 4930/4810 – BioComping (crosslisted with Biology)
- CSCE 4930 – Survey of Computational Science
- CSCE 4930/4820 – Special Topics - Computational Epidemiology
- Biol 4005/4820 – Special Topics in Biology – Computational Epidemiology
- Biol 4005/4810 - Biocomputing

Graduate (1997 – 2011):

CSCI 5780 - Computer Networks
CSCI 5330 - TCP/IP
CSCI 5330 - High-Speed Networks
CSCE 5020 – Research in Computer Science
CSCE 5533/5810 – BioComputing
CSCE 5533/5820 – Computational Epidemiology
Biol 5005/5820 - Special Topics in Biology – Computational Epidemiology
CSCI 5540/CSCE 5640 – Operating Systems
CSCI 6330 - Experimental CSCI
CSCI 6330 - Intelligent Mobile Agents
CSCI 6330 - Exploiting Mobility
CSCI 6330 - Quality of Service
CSCI 6330 - Proving System Correctness
CSCI 6330 - Security in Agent-Based Systems
CSCI 6330 – Computational Epidemiology
CSCI 6330 – Mathematical/Computational Models for Biology
CSCE 6330 – Bioinformatics
CSCE/Biol 6810 - Adv. Topics in Computational Life Sciences
CSCI 6780/CSE - 6680 Distributed Systems

In addition, I have supervised several Undergraduate and Graduate Directed Studies (CSCI 4890/5890) and Graduate Special Projects (CSCI 5900) since 1997.

Dissertation and Thesis Advising

Ph.D. Dissertation Advisor for:

Naveen Kakani – QoS in Wireless Networks (Ph.D. in Summer 2000.)
Kaja Abbas Computational Epidemiology (PhD Spring 2006)
Kaizar Amin – Ad Hoc Grid Computing (PhD Spring 2006)
Courtney Corley - Computational Epidemiology (PhD Summer 2009)
Tina Johnson - Computational Epidemiology (PhD Fall 2010)
Tamara Schneider -Computational Epidemiology – Response Plan Analysis (PhD Fall 2010)

Current PhD Students:

Iris Nelly Gomez (Computational Epidemiology)
Angel Bravo-Salgado (Computational Epidemiology)
David Keathly (Visualization for Computational Epidemiology)
Olivia Loza (Computational Epidemiology)
Marty O'Neill (Computational Epidemiology)
Jorge Reyes (Computational Epidemiology)
Sunil Manjeri (Computational Epidemiology, Bioinformatics)
Oleg Kolgushev (Computational Epidemiology)
Jessica Beckham (Computational Life Science) (graduate student in Biology/Env. Science)
Jedsada Chartree (Computational Epidemiology)
Meesumrarn,Thiraphat (Computational Epidemiology)
Joseph Helsing (Genomic Epidemiology and Bioinformatics)
Yiheng Liang (Computational Epidemiology)
Sarachandra Indrakanti

MS Thesis Advisor for:

Andy Hopper - Design of an Agent-Based File System (Spring '00)
Vinay Balamuru - Intelligent Mobile Agents in Network Management (Fall '00)
Prasanna Iyengar - Dynamic Reallocation of Network Resources in RSVP controlled Networks (Fall '01)
Subhashini Raghunathan - Proxy Certificates for Agent-Based Systems (Fall '02)
Sandhya Sriraman - An Annotated Bibliography of Mobile Agents in Networks (Fall '02)
Cliff Cozzolino - DADS: A Distributed Agent Delivery System (Fall '02)
Anupama Krishnan - Quality of Service provisioning with the Real-time Transport Protocol (Fall '02)
Glyco George - Quality of Service Provisioning in Ad-Hoc Networks (Spring 2003)
Kaizar Amin - Design and Analysis of Agent-Based Routing Algorithms (Spring 2003)
John Mayes - Modeling Complex Forest Ecology in a parallel computing infrastructure (Summer 2003)
Courtney Corley - Predicting the Population-Level Impact of a Demographically-Biased Intervention on HPV Prevalence (Spring 2006)
Sangeeta Venkatachalam - Modeling Infectious Disease Spread using Global Stochastic Field Simulation (Summer 2006)
Brandon Parker - Cellular Automata Based Cluster Architecture Performance Benchmarking (Summer 2006)
Cheryl-Annette Kincaid - Analysis of Sun Burst Activities as recorded by a Radio Telescope (Fall 2006)
Paul Miller - Automated Syndromic Surveillance using Intelligent Mobile Agents (Fall 2007)
Marty O'Neill - Agent-Based Simulation of Infectious Disease Epidemics (Summer 2009)

Current MS Thesis Advisees:

Sarachandra Indrakanti (Computational Epidemiology, expected graduation Summer 2011)

Project in Lieu of Thesis

Anup Pachlag - Agent-Based Service Discovery (Summer 2004)
Sandeep Nijasure - Analysis of Intrusion Detection Mechanism (Spring 2003)
Wei He - Design and Analysis of Novel Web-Caching Mechanisms using Online Benchmarking (Fall '02)
Ramakrishna Vellanki - Analysis of Mechanism for Secure Multicasting (Summer '02)

Member of Dissertation/Thesis Committee:

Victor Lopez - Ph.D candidate
Terry Tuck - Ph.D (Spring 2001)
Rajeev Jayaram - MS (Fall 1998)
Satyam Tyagi - MS (Spring 2000)
Chris Abbott-Wood - MS in Environmental Science (Spring 2002)
Wu Xiao - MS (Fall 2002)
Pankaj Gupta - MS (Fall 2002)
Sachin Joglekar - MS (Fall 2003)
Timothy Roden - Ph.D (Spring 2005)
Vandana Gunupudi - PhD (Spring 2008)
Ping Yu - (PhD Fall 2008)
Dhruva Ghai (PhD - Spring 2009)
Bani, Ruchi (MS - Fall 2009)
Roopa Vishwanathan (exp. PhD - 2010)
Garima Thakral - PhD - 2010
Balathasan Giritharan (exp. PhD - 2011)
Jonathon Doran (exp. PhD - 2011)
Bink Ruckthongsook (exp. MS in Geography - Summer 2011)
Sandeep Panchakarla (exp. MS Fall 2011)
Nicholaus Hollingshad (exp. PhD in Physics - Summer 2012)

RESEARCH GRANT ACTIVITIES

UNT Junior Faculty Research Grants

Summer 1998 - \$3,500.

Summer 1999 - \$3,500.

Summer 2000 - \$2,000.

Faculty Research Grant (for new faculty) - 1997

Research Initiation Grant (RIG)

Title: "A Simulator for Large High-Speed Communication Networks"

Amount: \$ 2,000

Proposal to Packet Engines, Spokane WA - 1998/99

Title: "A Distributed Simulation Environment for the Analysis of Autonomous Management and Control Mechanisms for High-Speed Communication Infrastructures "

Result: In Kind support in the form of a Gigabit Ethernet Routing Switch, Network Interface Cards, Cables, and Network Management Software worth over \$15,000.

UNT Faculty Research Grant – 1999 Research Initiation Grant (RIG) (with Dr. Tarau)

Title: "An Agent-Based Architecture to Gigabit Network Monitoring"

Amount: \$ 3,800

NSF: Small Grants for Exploratory Research - 2000

Title: Analysis of Fundamental Control Mechanisms for Mobile Agents in Large Network Infrastructures

Amount: \$52,957

Award # [0084846](#)

NSF DFB Ecosystem Studies - 2000

Title: "QEIB: uncertainty analysis, spatial interaction and response functions in scaling-up models of forest ecosystems" (with Prof. Miguel Acevedo and Michael Monticino)

Amount: \$95,880.00

Award # [0108563](#)

NSF – BioComplexity 2002

Title: "Biocomplexity: Integrating models of natural and human dynamics in forest landscapes across scales and cultures" (multiple co-PIs affiliated with the Institute of Applied Science at UNT, PI: Miguel Acevedo)

Amount: \$685,236.00

Award # [0216722](#)

NSF – Research Resources 2002

Title: "Research Resources: Computational Science and Engineering: Intelligent Information Acquisition and Management Infrastructure" (with Profs Kavi, Swigger, Wilson)

Amount: \$180,000 (120k from NSF, 60k UNT matching)

Award # [0222628](#)

Research Contract November 2002 – May 2003

Argonne National Laboratory (USDOE)

Title: "A Collective Framework for Active Chemical Tables"

Amount: \$ 35,252

Research Contract (Continuation) May 2003 – August 2003

Argonne National Laboratory (USDOE)

Title: "A Collective Framework for Active Chemical Tables"

Amount: \$ 18,616

Research Contract (Continuation) September 2003 – Mai 2004

Argonne National Laboratory (USDOE)

Title: "A Collective Framework for Active Chemical Tables"

Amount: \$ 19,734

Research Contract (Continuation June) 2004 – August 2004
Argonne National Laboratory (USDOE)
Title: "A Collective Framework for Active Chemical Tables"
Amount: \$ 14,836

Research Contract (Continuation) September 2004 – Dec 2005
Argonne National Laboratory (USDOE)
Title: "Dev. of Commodity Grid Kit Version 4"
Amount: \$ 52,867

NSF: Small Grants for Exploratory Research (Sep.2003 – May 2005)
Title: Towards Computational Epidemiology: Designing an Infectious Disease Simulator
Amount: \$ 50,319
Award # [0350200](#)

NIH: P20 MD001633-03 - Subaward from University of North Texas Health Science Center
Subaward period of performance: May 1, 2007 - April 30, 2008
Title: Computational Models to Evaluate Demographically Biased HIV/AIDS Interventions
Amount: \$56,797

**Analyzing Traffic Constraints and feasible Throughput for Public Health
Distribution Points in Tarrant County, 06/2008-07/2009**
Subcontract - Tarrant County Public Health Department, Fort Worth, TX
Amount: \$25,000

**Analyzing Traffic Constraints and feasible Throughput for Public Health
Distribution Points in Tarrant County, 01/01/2010-07/31/2010**
Subcontract - Tarrant County Public Health Department, Fort Worth, TX
Amount: \$60,800

NIH: 1 R15 LM010804-01 – (PI: Armin R. Mikler; Co-I: Chetan Tiwari) – 06/21/2010 – 06/20/2013
Title: A Computational Framework for Assessing the Feasibility of Bio-emergency Response
Amount: \$429,608

CENTER GRANTS

Project Title: **Center for Computational Epidemiology (CCE) – Center Development Grant (Equipment only)**
Sponsor: DHHS – US Department of Health and Human Services (PIs: Atkinson, Mikler, Oppong)
Project Period: 06/01/08 – 09/30/09
Amount: \$473,707

Project Title: **Center for Computational Epidemiology (CCE) – Center Development Grant (Equipment only)**
Sponsor: DHHS – US Department of Health and Human Services (PIs: Atkinson, Mikler, Oppong)
Project Period: 08/01/2009 - 01/31/2011
Amount: \$235,620

Project Title: **Center for Computational Epidemiology (CCE) – Center Development Grant (Equipment only)**
Sponsor: DHHS – US Department of Health and Human Services (PIs: Atkinson, Mikler, Oppong)
Project Period: 08/01/2010 - 07/31/2011
Amount: \$346,500

EDUCATIONAL GRANT ACTIVITIES

Texas Technology Workforce (TWD) Grants Program (2005 – 2006)

Title: Improving Student Recruitment and Retention through an Interdisciplinary CS Curriculum

Amount: \$ 49,656

Other Support:

Obtained Microsoft Educational Support in the form of multiple MSDN Membership subscriptions, Software and OS licenses for Faculty members in CSCI in 1997, 1999, 2000, and 2001. Estimated value: \$12,000 each year.

Travel Support from Ames Laboratory (USDOE)

- Super Computing Conference, SC97 in San Jose, November 1997.
- Super Computing Conference, SC98 in Orlando, November 1998.
- Research Collaboration Visit to Ames Laboratory, Iowa State University, July 1999.

Student Support from Ames Laboratory (USDOE)

- Summer Internship for one student (John Mayes) in Summer 1999.
- Summer Support for one student (Cliff Cozzolino) in Summer 2000.

PUBLICATIONS

Dissertation

Mikler, A. R. (1995). "Quo Vadis -- A Framework for Intelligent Routing in Large Communication Networks." Ph.D. Dissertation, Iowa State University, 1995.

Editorship:

Unger H., Böhme T. and Mikler A.R., "Innovative Internet Computing Systems". *Second International Workshop, IICS 2002*. Lecture Notes in Computer Science (LNCS) 2346, Springer Verlag, Berlin.

Arslam A., Chen S., Deng Y., Huang Y., Mikler A.R., Wang Y., Xi D., and Zhao Z.(Associate Editors), "Proceedings of the 2009 International Joint Conference on Bioinformatics, System Biology, and Intelligent Computing (IJCBS 2009). IEEE Computer Society 2009.

Book Chapters

Wong, J.S.K. and Mikler, A.R. (1993). "Routing Algorithms for High-Speed Communications Networks." *Broadband Communications Systems*. (Ed. Conard, J. W.) Auerbach Publications, 97-105.

Wong, J.S.K., Vaidya P. and Mikler, A.R. (1993). "Dynamic Bandwidth Allocation in Broadband ISDN." *Broadband Communications Systems*. (Ed. Conard, J. W.) Auerbach Publications, 267-276.

Journal Papers in Progress or under Review:

Journal Papers Published or Accepted (Peer Reviewed):

Jimenez, T, Mikler AR, Tiwari C. (2011) In Press. A Novel Space Partitioning Algorithm to Improve Current Practices in Facility Placement. *IEEE Transactions on Systems, Man, and Cybernetics, Part A: Systems and Humans*.

Jorge Reyes-Silveyra, Armin R. Mikler, Justin Zhao, Angel Bravo-Salgado. "Modeling infectious disease outbreaks in non-homogenous populations", *Journal of Biological Systems*, World Scientific Publishing, Singapore, Vol. 19, Issue 4 (2011), Page: 591-606

Tina V. Johnson and Armin R. Mikler. "Chasing R0: Understanding the Effects of Populations Dynamics on the Basic Reproduction Number". *Journal of Biological Systems*, World Scientific Publishing, Singapore, Vol. 19, Issue 4 (2011), Page: 577-589

Courtney D. Corley, Diane J. Cook, Armin R. Mikler, and Karan P. Singh. (2011) "Using Web and Social Media for Surveillance", *Advances in Computational Biology*, Springer Series: *Advances in Experimental Medicine and Biology*, Vol 680. 1st Edition 2011, Springer, pp 559:564

Courtney D Corley, Rada Mihalcea, Armin R Mikler and Antonio P Sanfilippo, "Predicting Individual Affect of Health Interventions to Reduce HPV Prevalence", to appear in *Software Tools and Algorithms for Biological Systems*, Springer Series: *Advances in Experimental Medicine and Biology*, Vol. 696 1st Edition, Springer, 2011

Hala D., Amin A. Mikler A., and Huggett D. B., "A CONstraint-Based STOichiometric Model Of The Steroidogenic Network Of Zebrafish (*Danio Rerio*)" *Journal of Biological Systems*, Vol. 18, Issue. 3 (2010) Page: 669-685.

Tamara Schneider, Armin R Mikler, "RE-PLAN: A Computational Framework for REsponse PLaN Analysis", *Int. J. Functional Informatics and Personalized Medicine* 3(2):103-121 (2010).

Courtney D. Corley *, Diane J. Cook, Armin R. Mikler and Karan P. Singh, "Text and Structural Data Mining of Influenza Mentions in Web and Social Media" *Int. J. Environ. Res. Public Health* 2010, 7(2), 596-615

CD Corley, AR Mikler, DJ Cook, and KP Singh "Dynamic intimate contact social networks and epidemic interventions", *Int. J. Functional Informatics and Personalized Medicine*. (2008) Vol.1, No.2, pp.171-188.

Armin R. Mikler, Sangeeta Venkatachalam, Sushasini Ramisetty-Mikler, "Decisions under Uncertainty – A Computational Framework for Quantification of Policies to Address Infectious Disease Epidemics" in the *Journal for Stochastic Environmental Research and Risk Assessment (SERRA) Special Issue on "Medical Geography as a Science of Interdisciplinary Knowledge Synthesis under Conditions of Uncertainty (2007)"* No. 5, vol 21:533-543.

Venkatesan, I.P., Mikler A.R., Dantu R., and Abbas K. "Dynamic Resource Management in RSVP Controlled Unicast Networks". *Telecommunications Systems* (2006) 32: pp 11 – 30.

Mikler A.R., Venkatachalam S., and Abbas K. " Modeling Infectious Diseases using Global Stochastic Automata". in the *Journal of Biological Systems*, Vol. 13, No. 4 (2005) 421-439.

Boukerche A. Mikler A.R., and Fabbri A. "Resource Control for Distributed Discrete-Event Simulation System over Loosely Coupled Domains" in the Special Issue on Design and Performance of Networks for Super-, Cluster-, and Grid-Computing, in *the Journal of Parallel and Distributed Computing (JPDC)*, vol. 65 (2005) pp. 1171 - 1189

Raghunathan S. Mikler A. R. Cozzolino C. "Mobile Agent Security: Authentication, Authorization and Secure Delegation using X.509 Proxy Certificates". *The Journal of Systems and Software* volume 75 issue 1-2, Feb. 2005, pages 125 - 137.

Amin K.A. and Mikler A.R., "Design and Analysis of ADVR - Agent-Based Distance Vector Routing ". *The Journal of Systems and Software* volume 71 issue 3, May 2004, pages 215-227.

Amin K.A. , Mikler A.R., and Venkatesan Iyengar Prasanna, "Dynamic Agent Population in Agent-Based Distance Vector Routing ". *Journal of Neural Parallel and Scientific Computing: Special issue on Advances in Intelligent Systems*, Vol. 11, No. 1 & 2, March & June 2003

Acevedo, M.F., Parmati, S., Ablan, M., Urban, D.L., Mikler, A.R. "Modeling Forest Landscapes: Parameter Estimation from Gap Models over Heterogeneous Terrain," in *SIMULATION*, Volume 77, Number 1-2, pp. 53-68, July-August 2002.

Mikler, A.R., Honavar, V.G., and Wong, J.S.K "Parameterized Heuristics for Autonomous Adaptive Routing in Large Networks." *The Journal of Systems and Software*. Volume 56 (2001), pp. 231-246.

Kalla, M., Wong, J., Mikler, A.R., and Elbert, S. " Achieving Non-Repudiation of Web-Based Transactions". *The Journal of Systems and Software*. Volume 48 (1999), pp. 165-175.

Wong, J.S.K. and Mikler A.R. "Intelligent Mobile Agents in Large Distributed Autonomous Cooperative Systems." *The Journal of Systems and Software, Special Issue: Software Engineering and Systems in the New Millennium*. Volume 47 (1999) pp. 75-87.

Wong, J.S.K., Nayar R. and Mikler, A.R. "A Framework for a World Wide Web Based Data Mining System." *The Journal of Network and Computer Applications*, Volume 21 (1998), pp. 163-185.

Mikler, A.R., Wong, J.S.K., and Honavar, V.G. "An Object-Oriented Approach to Simulating Large Communication Networks." In *The Journal of Systems and Software*. Volume 40, No.2 (1998) pp. 151-164.

Mikler, A.R., Wong, J.S.K., and Honavar, V.G. "Quo Vadis -- A Framework for Intelligent Routing in Large Communication Networks," *The Journal of Systems and Software*. Volume 37, No.1 (1997) pp. 61-73.

Conferences (Peer Reviewed):

Martin O'Neill II, Armin R Mikler, Tamara Schneider: "An Extensible Software Architecture to Facilitate Disaster Response Planning" in the Proceedings of the 2011 International Conference on Bioinformatics and Computational Biology, July 18-21, 2011, Las Vegas, pp 393-400, (24%)

Tamara Schneider, Armin R Mikler and Marty O'Neill, Computational Tools for Evaluating Bioemergency Contingency Plans in *Proceedings of the 2009 International Conference on Disaster Management/*. New Forest, England, September 2009.

Tina Johnson and Armin R Mikler, The Elusive R₀ - Chasing the Reproductive Number in *Proceedings of the 2009 International Conference on Bioinformatics and Computational Biology (BIOCOMP09)*. Las Vegas, NV, July 2009. (26%)

Tamara Schneider, Armin R Mikler and Marty O'Neill, Analyzing Response Feasibility for Bioemergencies in *Proceedings of the 2009 International Joint Conferences on System Biology, Bioinformatics and Intelligent Computing (IJCBS09)*. Shanghai, China, August 2009. (22%)

Courtney D. Corley, Armin R. Mikler, Karan P. Singh and Diane J. Cook, Monitoring Influenza Trends through Mining Social Media in *Proceedings of the 2009 International Conference on Bioinformatics and Computational Biology (BIOCOMP09)*. Las Vegas, NV, July 2009. (26%)

Courtney D. Corley and Armin R. Mikler, A Discrete-Time Epidemic Model to Analyze Impact of Age and Gender Targeted Interventions in *Proceedings of the 2009 International Conference on Bioinformatics and Computational Biology (BIOCOMP09)*. Las Vegas, NV, July 2009. (26%)

Tamara Schneider, Olivia G. Loza, Armin R. Mikler, Computational Epidemiology: Generating Synthetic Cities in *Proceedings of the 2009 International Conference on Information and Knowledge Engineering (IKE09)*. Las Vegas, NV, July 2009. (26%)

Armin R Mikler, Angel Bravo-Salgado and Courtney D. Corley, Global Stochastic Contact Modeling of Infectious Diseases in *Proceedings of the 2009 International Joint Conferences on System Biology, Bioinformatics and Intelligent Computing (IJCBS09)*. Shanghai, China, August 2009. (22%)

Courtney D. Corley and Armin R. Mikler, A Computational Framework to Study Public Health Epidemiology in *Proceedings of the 2009 International Joint Conferences on System Biology, Bioinformatics and Intelligent Computing (IJCBS09)*. Shanghai, China, August 2009. (22%)

Corley, C. D.; Brown, L.; Mikler, A. R.; Cook, D. J.; Singh, K., Generating social networks of intimate contacts for the study of public health intervention strategies, in Proceedings of IEEE Seventh Symposium on Bioinformatics and Bioengineering (BIBE '07), Boston, Mass. 2007, Page(s): 1235-1239 (<12%)

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Mikler, A.R., Honavar, V., and Wong, J. (May 12, 1992). "A Knowledge-Based Approach to Dealing with Uncertain and Incomplete Information in Communication Network Management", at the First Canadian Workshop on Uncertainty Management: Theory and Practice; Vancouver, B.C. Canada.

Mikler, A.R. (Nov. 1995). "The Need for Service Assurance in a Global Computing Environment", U.S. Department of Energy Security Workshop at Argonne National Laboratory, November 15-17.

Mikler, A.R. (April 1997). "Roadmap to the Pentium-Pro Cluster Workshop", First Pentium-Pro Cluster Workshop, sponsored by the U.S. department of Energy, Des Moines, Iowa April 1997.

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Mikler, A.R. (November 2000). "The Role of Agents in Network Management and Routing." NSF-PIs in Networking Workshop, University of California, Irvine. Nov. 1-3, 2000.

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Elbert, S., Snell, Q., Mikler, A., Helmer, G., Csanady, C., Stearns, K., MacLeod, B., Johnson, M., Osborn, B., and Verigin, I. (1997), "Gigabit Ethernet and Low-Cost Supercomputing". Technical Report #5126, Ames Laboratory, Ames, Iowa.

TUTORIALS AND INVITED TALKS

- 1.Short course titled " The Use of Expert Systems and Other Technologies in State Government Applications ", at the Making Information Work Conference by The National Governors' Association, Washington, DC., January 1992
- 2.Technical University of Berlin, Germany. May 2000. Colloquium Presentation. "Exploiting Mobility Intelligent Mobile Agents in Network Management and Traffic Control"
- 3.University of Rostock, Germany. June 2000. Colloquium Presentation. "Exploiting Mobility Intelligent Mobile Agents in Network Management and Traffic Control"
- 4.Fachhochschule Darmstadt, Germany. June, 2000. In-Class Presentation. "Research on Intelligent Mobile Agents".
- 5.Center for Discrete Mathematics and Computer Science (DIMACS) at Rutgers University. Working Group Meeting on Adverse Event / Disease Reporting, February 2004. " Towards Computational Epidemiology"
- 6.Centers for Disease Control and Prevention (CDC) Atlanta, February 2004. "Towards Computational Epidemiology: Designing an Infectious Disease Outbreak Simulator".
- 7.Iowa State University, Department of Computer Science Colloquium, April 2004. "Towards Computational Epidemiology: Designing an Infectious Disease Outbreak Simulator".
- 8.University of Ottawa, Computer Science Colloquium Sep. 2004. "Computational Epidemiology"
- 9.University of North Texas Health Science Center, November 2004. "An Introduction to Computational Epidemiology"
- 10.National Cancer Institute (NCI/NIH) October 2005. " From Mathematical Models to Computational Epidemiology: Facilitating Epidemiological Research through Computational Tools"
- 11.Iowa State University, Department of Computer Science Colloquium Series, November 2005. "From Mathematical Models to Computational Epidemiology: Facilitating Epidemiological Research through Computational Tools"
- 12.Fernuniversitaet in Hagen, Germany, Fachbereich Kommunikationssysteme Colloquium Series, June 2007 "From Mathematical Models to Computational Epidemiology: Facilitating Epidemiological Research through Computational Tools"
- 13.I2CS-2007, Universitaet der Bundeswehr, Munich, Germany, June 2007, "From Mathematical Models to Computational Epidemiology: Facilitating Epidemiological Research through Computational Tools"
- 14.University of Paris, Laboratory for Complex Systems, Colloquium, June 2007, " Computational Epidemiology"
- 15.Technische Universitaet Ilmenau, Ilmenau, Germany, Fachbereich Computer Science Colloquium, July 2007 "From Mathematical Models to Computational Epidemiology: Facilitating Epidemiological Research through Computational Tools"
- 16.Technische Universitaet Ilmenau, Ilmenau, Germany, Fachbereich Mathematics Colloquium, July 2007 "Computational Epidemiology"
- 17.EpiGrid Keynote: Fernuniversitaet Hagen, Germany, November 2007, "Modern Epidemiology – A New Computational Science"
18. Texas Department of State Health Services (DSHS) Grand Rounds Lecture, Nov. 30, 2011 in Austin,Texas, "Utilizing Computational Tools for the Design and Analysis of Bio-Emergency Response Plans"