CURRICULUM VITAE AS OF January 1, 2024

Kurt Maly

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Born in Modling, Austria, August 20, 1944; Austrian citizen; permanent resident of U.S.A.

1954-63	Grammar School, Modling, Austria
1963-64	Military Service, Austria
1964-68	University of Technology, Vienna, Austria
1968-72	Graduate studies at Courant Institute of Mathematical Sciences, New York University, New York, New York
1972-78	Assistant Professor, Department of Computer Science, University of Minnesota, Minneapolis, Minnesota
1974-80	Director of Undergraduate Studies, Department of Computer Science, University of Minnesota, Minneapolis, Minnesota
1978-85	Associate Professor, Department of Computer Science, University of Minnesota, Minneapolis, Minnesota
1980-82	Acting Chairman, Department of Computer Science, University of Minnesota, Minneapolis, Minnesota
1980-85	Member of Board, MEIS, Minneapolis, Minnesota
1982-85	Head, Department of Computer Science, University of Minnesota, Minneapolis, Minnesota
1982-85	Member of Executive Committee, MEIS, Minneapolis, Minnesota
1988-91	Member of Board, Institute of Information Technology, CIT, Blacksburg, Virginia
1994-2002	ICASE consultant
1985-2007	Chair, Department of Computer Science, Old Dominion University, Norfolk, Virginia
1985-2017	Professor, Department of Computer Science, Old Dominion University, Norfolk, Virginia
1985-2017	Eminent Professor, Department of Computer Science Old Dominion University, Norfolk, Virginia

1986-current Visiting Professor (Honorary Professor), Chengdu University of Science and Technology, Chengdu, China

1989-2107 Eminent Scholar, Old Dominion University, Norfolk, Virginia

1991-current Visiting Professor (Honorary Professor), Hefei University of Technology, Hefei, P.R. China

1991-2017 Kaufman Professor, Old Dominion University, Norfolk, Virginia

1993-current Visiting Professor (Honorary Professor), Guangxi Computer Institute, Nanning, P.R. China

2017- current Kaufman Professor and Eminent Scholar Emeritus, Old Dominion University, Norfolk, Virginia

Degrees

Ph.D. Department of Computer Science, Courant Institute of Mathematical Sciences, New York University, New York, New York. Conferred February 1973. Thesis title: ``A Study in Programming Techniques"

M.S. Courant Institute of Mathematical Sciences, New York University, New York, New York. Conferred February 1970.

Diplom Ingenieur Technische Universitat zu Wien, Austria. Conferred May 1968. Thesis title: "Untersuchung zu Stabilitatsbereichen von Diskretisierungsverfahren" (Investigation into stability regions of discretization methods)

Honors and Awards

Graduated from grammar school with highest honors

Graduated from Technische Universitat zu Wien with equivalent of Summa Cum Laude

Fellowships for summer 1966 at Sorbonne, Paris, France

Fellowships for the years 1968-72 from Courant Institute of Mathematical Sciences

Best Paper award for Web96(see publication list: II, 72)

Finalist for Best Paper Award WETICE 96(see publication list: II,66)

Best Paper Award WETICE97/Distance Learning Workshop(see publication list: II,80)

Top paper award, SERVICES COMPUTATION 2009 (see publication list: II, 194)

Top paper award, SERVICES COMPUTATION 2010 (see publication list: II, 197)

The Shining Star Award – Fall 2010, Old Dominion University; it is presented each semester, to faculty members who have helped students succeed academically, professionally, and personally both inside and outside of the classroom.

Professional Activities

Associate editor, Journal for Microcomputer Application Technology, PRC.

Reviewer of books for Academic Press, Prentice-Hall, and Houghton-Mifflin, Brooks/Cole

Reviewer for National Science Foundation (proposals)

Reviewer for CIT (proposals)

Referee of Papers for CACM, Computing Review, IEEE Computer, IEEE Transactions on Computers, Information Processing Letters, IEEE Software.

Invited speaker at Hahn Meitner Institute, Berlin, December 1975

Member of Technical Program Committee for ACM '75

Organizer and chairman of panel discussion for ACM '75 entitled, ``Programming and its Implications on
Programming Languages"

Active in the development of curriculum recommendations for computer science

Invited participant in ``Computer Science and Industry Interface Meeting" sponsored by the Computer Science Board, June 4, 1978

Invited participant, Computer Science Seminar, IBM Research Laboratory, February 1980, San Jose, California

Invited participant, Computer Science Workshop, Honeywell, PMS Division, August 1981, Phoenix, Arizona

Invited speaker, IBM Engineering Managers Seminar, September 1981, New London, Minnesota

Invited participant, Computer Science Seminar, HP, February 1982, Cupertino, California

Invited speaker, Honeywell MTC, July 1982, Duluth

Invited participant, Carleton symposium on Artificial Intelligence, October 1984, Northfield, Minnesota

Invited speaker, Key Retrieval from Medium Sized Files, November 1984, Duluth

Member of ACM, IEEE, Sigma Xi

Invited speaker, CDC Technology Forecast, September 1985, Minneapolis

Invited speaker, Local and Metropolitan Area Networks, June 1986, Chengdu University

Invited speaker, A Network with Integrated Data and Voice Traffic, February 1987, College of William and Mary

Invited panelist, Software Productivity Workshop, March 1987, Reston, Virginia

Invited participant, Supercomputer Consortium Taskforce, April 1987, Herndon, Virginia

Invited speaker, Dynamic Loadsharing in a Local Area Network, June 1987, Virginia Tech

Organizer, First meeting of department heads of Virginian Ph.D. granting universities, November 1987

Invited speaker, NAVMASSO, A Maintenance Support Environment, July 1988, Norfolk, Virginia

Invited speaker, Virginia Tech, Towards a Gigabit Network, July 1988, Blacksburg, Virginia

Organizer, Second meeting of department heads of Virginian Ph.D. granting universities, August 1988

Invited speaker, NASA, Networks, October 1988

Invited speaker, Sun Micro Systems, Parallel FDDI, February 1989

Participant, Symposium on The University of the Twenty-First Century, April 1989, Charlottesville, Virginia

Organizer, Third meeting of department heads of Virginian Ph.D. granting universities, September 1989

Invited participant, Supercomputer Consortium Taskforce, November 1989, Herndon, Virginia

Invited speaker, NASA, Maintenance, November 1989

Invited participant, Navy Education Consortium, University of West Florida, November 1989

Participant, SCHEV computer committee

Invited speaker, NASA, Networks, January 1990

Invited speaker, Sun Micro Systems, FDDI, February 1990

Participant, SCHEV, Equipment Trust Fund, computer science sub-committee

Invited speaker, SPC, Software Design Based on Decisions, March 1990

Invited speaker, Hefei University, High Performance Networking, July 1990

Invited speaker, CIT, Siemens, Gigabit Networking, August 1990

Organizer, Fourth meeting of department heads of Virginian Ph.D. granting universities, October 1990

Technical Program Committee Member, International Workshop on Advanced Communications and Applications for High Speed Networks 92, November 1990, Munich

Invited speaker, A Reliable Gigabit Network Based on Parallelism, DARPA, January 1991

Invited speaker, Parallel Transport Protocols, Sun Micro Systems, January 1991

Invited speaker, Network Management, NASA, February 1991

Invited speaker, Remote Visualization, Fiber Institute, April 1991, Blacksburg, Virginia

Invited speaker, Trends in Communications, Unix Conference, June 1991, Norfolk, Virginia

Invited speaker, Parallel Communications, E-Systems, June, 1991, Washington, DC

Program committee meeting, IWAC'92, July 1991, Munich

Invited speaker, Parallel Communications, DARPA, September 1991, Washington, DC

Organizer, Fifth meeting of department heads of Virginian Ph.D. granting universities, October 1991

Invited speaker, Highspeed Networking, ODU, October 1991

Invited speaker, Parallel Communications, DARPA, December 1991, Washington, DC

Invited participant, The Future Direction of the Faculty in Virginia, October 1991, Richmond, Virginia

Invited speaker, Network Management, Sun Micro Systems, January 1992

Invited member, Virginian Scholar Awards Committee, March 1992

Invited speaker, High Speed Computer Networks, CIT, June 1992, Herndon, Virginia

Invited panelist, Workshop on Careers for Experimental Computer Scientists, July 1992, Snowbird, Utah

Invited co-chair, Workshop on Electronic Dissemination of Technical Reports, 1992, Snowbird, Utah

Invited speaker, Parallel Communications, IIT, August 1992, Delhi, India

Invited speaker, High Performance Networking, National Aeronautics Laboratory, August 1992, Bangalore, India

Invited speaker, Network Management Based on User Response Time, IIT, September 1992, Bombay, India

Invited speaker, Parallel TCP, Mitre, December 1992, Washington, DC

Invited member, Advisory board - NSF grant to University of Virginia, Charlottesville, January 1993

Invited speaker, Parallel Communication, University of the West of England, March 1993, Bristol

Invited speaker, Decision Based Software Development, Telekom Fachhochschule, March 1993, Berlin

Invited participant, Research conference, Sun Micro Systems, April 1993, San Jose, California

Invited panel member, NSF EI grant evaluation, April 1993, Washington, DC

Invited speaker, Hypertext systems, Guangxi Computer Institute, May 1993, Nanning

Invited speaker, High Speed Networks, Beijing Information Technology Institute, May 1993, Beijing

Invited speaker, High Speed Networks, Tsinghua University, May 1993, Beijing

Chairman, Local Arrangements, High Performance Communications Subsystems Conference, IEEE,
September 1993, Williamsburg, Virginia

Invited speaker, NASA, pPVM in Support of Distributed Computing, November 1993

Co-organizer, Virginia/ICASE/LaRC Program in High Performance Computing and Communication, December 1993

Invited speaker, Sun Microsystems, North Carolina, January 1994

Demonstrator, Interactive Remote Instruction Prototype, Norfolk and Richmond, February 1994

Member of the export committee of New Software Technology Laboratory of Guangxi. The New Software
Technology Lab. of Guangxi

Invited speaker, NASA, Large Scale Scientific Computing, March 1994

Invited speaker, NASA, pPVM in Support of Distributed Computing, March 1994

Invited site visitor, UCSD NSF site visit for CISE RI program, San Diego, March 1994

Invited speaker, Interactive Remote Instruction, TJ Watson, IBM, Yorktown Heights, March 1994

Invited speaker, Interactive Remote Instruction, Sun Microsystems, Mt. View, April 1994

Invited speaker, Melding Television, Networking, and Computing for Interactive Remote Instruction, Tsing Hua University, Taiwan, May 1994

Invited speaker, A Prototype for Parallel Ethernets, Chung Cheng University, Taiwan, May 1994

Invited speaker, Melding Television, Networking, and Computing for Interactive Remote Instruction, Chung Cheng University, Taiwan, May 1994

Invited member, Advisory board - NSF grant to University of Virginia, Charlottesville, May 1994

Invited speaker, A Framework for Parallel Networking of PVM, 1994 PVM User Conference, Tennessee, May 1994

Invited panelist, Distance Learning, IFIP `94, Hamburg, Germany, August 1994

Member of program committee for Symposium on Parallel and Distributed Processing, Texas, June 1995

Member of program committee for International Symposium on Advances in Computers and Communications, Alexandria, Egypt, June 1995

Invited speaker, Wide Area Technical Report Service, Monticello Library Workshop, Blacksburg, Virginia,
August 1994

Invited speaker, Remote Instruction, Sun Microsystems, San Francisco, September 1994

Invited presentation, A Testbed for Interactive Remote Instruction, NSF, Washington D.C., November 1994

Invited presentation, NAVYSAF for WIZZARD, ARPA, Norfolk, November 1994

Invited presentation, Distance Learning: Collaborative Instruction, Syracuse University, New York, December 1994

Invited speaker, Interactive Multimedia, Sun Microsystems, Mountain View, California, February 1995

Invited presentation, Distributed Multimedia for Software Engineering Education, Software Quality Conference, Tyson's Corner, Virginia, March 1995

Invited presentation, Bringing Industry Perspective into the Computer Science Curricula, Software Quality
Conference, Tyson's Corner, Virginia, March 1995

NSF site visitor, University of Texas, Austin, March 1995

NSF panel member, Visiting Professorships for Women, Washington DC, March 1995

Invited presentation, Scaling of Multimedia Tools for Remote Instruction, TJ Watson Laboratories, IBM, March 1995

Invited participant, Panel to combine DIENST and WATERS, ARPA and NSF sponsored, Washington, DC, April 1995

Invited presentation, Communication benchmark, ARPA, Washington DC, April 1995
NSF panel member, Academic Research Infrastructure, Washington DC, May 1995

Invited participant, AllSAF meeting, ARPA and DOD, Austin, Texas, August 1995

Invited keynote address, Interactive Instruction for Engineering, 52nd International Congress of Informatics for Engineering, Blumenau, Brazil, Nov. 95

Invited presentation, CoReview - University and Industry Cooperation, University of Blumenau, Brazil,
Nov. 95

Invited presentation, Interactive Remote Instruction, University of Florianopolis, Brazil, Nov. 95

Invited presentation, Distributed Multimedia, University of Mannheim, Germany, Dec. 1995

NSF panel member, Undergraduate education in Research, Washington DC, Dec. 1995

Invited presentation, Distance learning, IBM, Heidelberg, Germany, Dec. 1995

Steering Committee for NCSTRL member, with Robert Kahn - CNRI, Barry Leiner - ARPA, Steve Griffin - NSF, Dean Krafft - Cornell, Jan. 1996

Invited address, Distance learning for higher education, HP Distance Learning Initiative Workshop, London, England, Feb. 1996

Member of program committee for Second International Symposium on Computers and Communications, Alexandria, Egypt, July, 1997

Workshop Organizer, Distance Learning, WET ICE '96, "Collaborating on the Internet: The World-Wide Web and Beyond", Stanford, June 96

Invited demonstration, IRI System, for IBM TJ Watson Lab, Norfolk, Feb. 1996

Member of program committee, 3rd International Conference on High Performance Computing, Trivandrum, India, Dec. 1996

Invited demonstration, IRI System, for Sun Microsystems, California, Norfolk, March 1996

Invited presentation, Quality Standards for NCSTRL, NCSTRL steering committee, Washington DC, March 96

Invited participant, Sun Research and Education Conference, San Francisco, April 1996

Invited presentation, Coreview, NASA Goddard, Washington DC, May 1996

Invited presentation, Secure Distributed Applications, DCCC Conference, Berkeley, May 1996

Invited presentation, Virtual Classroom, SDNE, Macau, May 1996

NSF panel member, Academic Research Infrastructure, Washington DC, June 1996

Member of program committee, HPN 97

Member of program committee, ISCC'97

Invited presentation, Communication Benchmark, ICASE Roundtable, Williamsburg, Oct. 96

Member of program committee, CSI97

Invited presentation, Computer Productivity Initiative, NSF EI PI meeting, Salt Lake City, Nov. 96

Working group meeting presentation, Multidomain Expansion, NCSTRL, Washington DC, Nov. 96

Invited participant, Intellctual Property Rights Workshop, CRA, Washington DC, Dec. 96

Steering committee meeting, NCSTRL, Stanford, Dec. 96

Member of program committee, WETICE ’97, Distance Learning

Invited presentation, IRI, NSF NIE PI meeting, Pittsburgh, April 97

Invited participant, ECCS meeting, San Diego, April 97

Invited address, Interactive Distance Learning, HPN97, Whiteplains, April 97

Member of program committee, ISCC'98

Invited address, Computer Science in a Distance Learning Environment, 10th Conference on Software Engineering Education & Training, Virginia Beach, April 97

Invited presentation, CoProcess, NASA Goddard, April 97

Invited Panelist, Middleware, HPCS97, Chalkidiki, Greece, June 97

Steering committee meeting, NCSTRL, CNRI, Washington DC, July 97

Invited presentation, IRI, University of Singapore, July 97

Invited presentation, A Distributed Simulation Environment, Brunel University, London, England, August 97

Invited presentation, Coordinated Web browsing, Jefferson Lab, ESCC meeting, Newport News, October 97

Invited keynote address, The Future of Interactive Remote Instruction to the Desktop, Science and Engineering Council, United kingdom, Coventry, Nov. 97

Steering committee meeting, NCSTRL, CNRI, Washington DC, Dec. 97

Member of program committee, PDCS97

Invited participant, DLI98 meeting, UC Berkeley, California, Dec. 97

Member Digital Library Metrics working group, meeting Stanford, Univ., California, Dec. 97

Invited presentation, Content Abstraction for Multimedia Streams, Sun Microsystems, Mountain View, California, Jan. 98

Member of program committee, HPN'98

Invited presentation, Distinguished Speaker Seminar, Learning paradigms and technology for distance learning, University of West Virginia, WVA, Febr. 98

Invited presentation, Distance Learning, Texas A&M, Collegetown, TX, Febr. 98

Invited presentation, IRI, Smart Schoolhouse, Navy, Dam Neck, Virginia Beach, Feb 98

Invited address, Interactive Remote Instruction Project, SURA / NCREN Advanced Networked Applications and Networked Video Workshop, MCNC, North Carolina, March 98

Invited participant, ESCC meeting, Berkeley, Calif. March 98

Vice-chair, ICDCS'99

Steering committee meeting, NCSTRL, CNRI, Washington DC, May 98

Invited speaker, SSI workshop, Jefferson Lab, Newport News, Virginia, June 98

Invited participant, Snowbird CS chairs workshop, Snowbird, Utah, July 98

Invited participant, Advanced Scientific Computation DOE/NSF workshop, Washington DC, July 98

Invited participant, SURA, SSI workshop, Washington DC, July 98

Invited presentation, Platform independent IRI, NSF, Washington DC, Aug. 98

Steering committee meeting, NCSTRL, CNRI, Washington DC, Nov 98

NSF panel member, CISE REI program, Washington DC, Dec. 1998

NCSTRL+ demonstration, NSF program directors, Washington DC, Dec. 1998

Invite presentation, DLI2, NSF workshop, Washington DC, Jan 99

Senior Faculty and invited panelist, CAREER workshop, NSF, Washington DC, Jan 99

NSF panel member, CISE program, Washington DC, May 99

Invited presentation, Distance Learning and IRI, Texas A&M, May 99

Invited participant, SURA, workshop, Washington DC, July 99

Invited presentation, Cobrowsing, SUN Micros, Calif., Aug 99

Invited demo at ACM DL'99 conference, UDLF, Berkeley, Aug. 99

Invited presentation, UDLF for Science Learning, Digital Library Initiative 2 PI meeting, Ithaca, Oct. 99

Invited presentation and demo, Universal Preprint Service, Los Alamos National Lab, Santa Fe, Oct. 99

Invited presentation and demo, ODU digital library group tools, NSF, Washington Dc, Oct 99

Panelist, CAREER panel, NSF, Washington DC, Oct 99

Invited presentation, Federated Libraries Portal, JTASC, Suffolk, Oct 99

Invited presentation, XML based federation of digital libraries, MSCIA, Washington DC, Nov 99

Invited presentation, Interoperable digital libraries, State University of New York, Buffalo, NY, Dec 99

Panelist, Postdoc panel, NSF, Washington DC, Jan 2000

Steering committee meeting, NCSTRL, CNRI, Washington DC, March 2000

Panelist, Network panel, NSF, Washington DC, March 2000

Invited presentation, Digital libraries, ARPA, March 2000

Invited presentation, distance learning over cable, Cox Cable, Norfolk, April 2000

Invited presentation, Digital libraries for undergraduate education, DLI2 Pi meeting, Stratford, England, June 2000

Invited presentation, Multi-media environments, Dagstuhl seminar series, Dagstuhl, Germany, July, 2000

Invited presentation, IRI-h a JAVA-based distance learning environment, NJIATONG University, Beijing, PR China, Aug. 2000

Program committee, ICPP-01, Aug. 2000

Invited speech, Technology transfer in IT, Vice-governor, Guangxi, Nanning, PR China, Aug. 2000

Invited participation, OAI workshop, Lisbon, Portugal, Sept 2000

Invited participant, REC/NSF PI-meeting, January, 2001, Washington DC

Invited presenter, Arc - alphatest for OAI, OAI meeting, Washington DC, Jan. 2001

Invited committee member, ANSI/NISO Z39.18-1995 standards committee, Jan 2001

Invited presenter, Arc - alphatest for OAI, OAI meeting, Berlin, Germany, Feb. 2001

Invited presentation, Media Access Using Dynamic Bandwidth Systems, GMD Fokus, Berlin, Germany, February, 2001

Invited NISO standards meeting, Fort Belvoir, VA, Feb 2001

Program committee member, ICNEE 2002, March 2001

Invited booth at ACM1 conference, San Jose, March 2001

Invited presentation, OAI and STI Program Office funded projects, STI Manager meeting, NASA Goddard, April 2001

Program committee member, NDDL02, July 2001

Invited NISO standards meeting, Fort Belvoir, VA, Aug 2001

Invited member, Information Technology Industry Steering Committee, Plan for the Commonwealth's Information Technology Industry, August 2001

NCSTRL-OAI steering committee meeting, UVA, Charlottesville, Sept 2001

Invited presentation, OAI-based Technical Report Exchange, AISTI , Santa Fe, Oct 2001

Digital library demonstration, Admiralty, COMOPTEVOR, Norfolk, Oct 2001

Invited presentation, New NCSTRL implementation, NSF, Oct 2001

CIT Steering Committee meeting, Herndon, Oct 2001

Invited presentation, Internet technologies for AOL, CIT/AOL, Herndon, Nov 2001

NSDL meeting, OAI based Physics library, American Physics Society, Ridge, NY, Nov 2001

NSDL PI meeting, NSF, Washington DC, Dec 2001

Invited NISO standards meeting, Fort Belvoir, VA, Jan 2002

NSDL steering committee meeting, College Park, Maryland, Feb 2002

Invited presentation, Automatic classification, DTIC, Ft. Belvoir, March 2002

Invited presentation, Digital Library for Test programs, AFRL, Albuquerque, March 2002

CIT Steering Committee meeting, Newport, March 2002

Invited presentation, OAI-based digital libraries, CASI, Baltimore, May 2002

Invited presentation, PI meeting, DLI2, Edinburgh, Scotland, June 2002

Invited Governing Board member, Internet TIC, July 2002

Invited participant, Snowbird conference, Utah, July 2002

Invited NISO standards meeting, Fort Belvoir, VA, Aug 2002

Program committee member, ICNEE 2003, September 2002

Invited presentation, OAI at Dlib at ODU, CERN, Geneva, Switzerland, Sept 2002

Invited presentation, TRI , AISTI, Santa Fe, Oct. 2002

Program committee member, NDDL 2003, September 2002

NSDL/Kepler meeting, Los Alamos, Santa Fe, Oct 2002

Invited presentation, Interactive remote instruction, University of Florence, Italy, Oct 2002

NSF site visit, East Lansing, Michigan State Univ. Nov 2002

Invited participant, NSDL PI meeting, Wash. DC, Dec 2002

Invited NISO standards meeting, Fort Belvoir, VA, Dec 2002

Invited panelist, NSF/CISE, Wash DC, Dec 2002

Board meeting, TIC, University of Virginia, Charlotte, Feb 2003

Keynote presentation, PI meeting for Kepler, Denver, March 2003

Invited address, "The NSDL project", 2nd Ibero-American Digital Library workshop, Campinas, Brazil, March 2003

Invited keynote address, "The OAI Movement", ISTEC Congress, Campinas, Brazil, March 2003

Invited address, "Archon – a Federation of Physics Digital Libraries and Kepler", I3DL, Belo Horizonte, Brazil, March 2003

Invited address, "XML and Technical Reports", CENDI Workshop, Department of Agriculture, Washington DC, April 2003

Program committee member, NDDL 2004, August 2003

Invited address, "Free (sort of) Digital Library Software for Education and Science", LACFREE 2003, Cuzco, Peru, August 2003

System demonstration, " Shiboleth for distributed digital libraries", Los Alamos National Laboratories, Norfolk, Aug 2003

NSF SBIR panel member, Wash DC, Aug 2003

NSF panel member, Wash Dc, Aug 2003

System demonstration, " Shiboleth for distributed digital libraries", American Physics Society, Norfolk, Sept 2003

Invited ANSI/NISO Z39.18 standards meeting, Fort Belvoir, VA, Sept 2003

Invited address, "Digital Libraries, OAI and Free Software for Education and Science ", 5th National Conference CACIS, Yinchuan, PRC, September 2003

Invited presentation, XML for technical reports, DTIC, Ft. Belvoir, Oct 2003

Invited speaker, NSDL Services Interoperability and Web Services, NSDL PI meeting, Wash. DC, Oct 2003

Invited ANSI/NISO Z39.18 standards meeting, Fort Belvoir, VA, Oct 2003

Invited presentation, ARC – An Open Source Metadata Harvesting System, Metascholar Workshop, Atlanta, Oct 2003

Invited presentation, Archon digital library access system, NSF DLI2 PI meeting, Wash. DC, Dec 2003

Chair, Program Committee, ICNEE 04, Switzerland, Feb 2004

Internet conference, Open Source IRI-easy, Universities of Michigan, Oregon, South Africa, Feb 2004

PI meeting, Kepler – a communal digital library, Los Alamos National Laboratory, March 2004

NSF panel member, Wash Dc, March 2004

Invited participant, Old Dominion University Research Day, Archon and Iri-h, Norfolk, March 2004

NSF panel member, Wash DC, May 2004

Invited participant, Snowbird chairs' meeting, Snowbird Utah, July 2004

Presentation to IBM autonomic computing committee, conference call, August 2004

Invited presentation, NASA STI demonstration, Raytheon, Newport News, Oct 2004

Invited presentation, NSDL PI meeting, NSF, Chicago, Nov 2004

Invited speaker. The ODU digital library research effort, NSF-Sponsored Workshop on Promoting Collaborative Research in Computers and Communications *between US and Middle Eastern Researchers*, Cairo, Egypt, January 2005

Invited presentation, Automated metadata extraction, NASA STI Technology Infusion Team, Langley, May 2005

Invited presentation, High Performance Parallel Lucene search, NASA STI Technology Infusion Team, Langley, June 2005

Invited presentation, OAI-based Linking Services, NASA STI Technology Infusion Team, Langley, July 2005

Invited presentation, Automated metadata extraction, CASI, January, 2006

Invited presentation, Metadata discovery, Government Printing Office, Washington DC, February, 2006

Organizer and presenter, IBM Readiness Workshop – Autonomic Computing, Norfolk, Feb. 15-16, 2006

Invited speaker, Automated Metadata Extraction, Defense Research & Engineering Information for the Warfighter, DTIC 2006 Conference, Alexandria, April 2006

Invited participant, Snowbird Chairs' Conference, Snowbird, Utah, June 2006

Invited keynote speaker, Automated Metadata Extraction and Categorization, CACIS 2006, Taiyuan, China, July 2006

Invited keynote speaker, Metadata Extraction for Legacy Collection, ICCTA 2006, Alexandria, Egypt, September 2006

Invited presentation, Infrastructure-aware Autonomous Manager, IBM policy group, Nov 2006

Invited presentation, Classification through validation, DTIC and NASA, Dec 2006

Invited presentation, Advances in Digital Libraries, Bucharest Polytechnic University, Romania, March 2007

Invited presentation, Automated metadata extraction, Babes-Bolyai University, Cluj, Romania, March 2007

Invited presentation, Distance learning, Brasov Polytechnic University, Brasov, Romania, March 2007

Invited presentation, Template based extraction of rich metadata, Senior management, DTIC, Ft. Belvoir, Virginia, April 2007

Invited presentation, Feasibility to automate NASA cataloguing, Senior management, NASA Langley, June 2007

Invited presentation, Automated metadata extraction for government agencies, GPO, Wash. DC, Oct. 2007

Invited presentation, Automated metadata extraction for government agencies, NTIS, Springfield, VA, Oct. 2007

Invited presentation, Collaborative Facet Creation, AISTI, Norfolk, Oct 2007

Site visit, GPO team, Norfolk, VA, Feb 2008

Invited panelist, IIS, NSF, Washington DC, April 2008

Invited speaker, Metadata Extraction, Metadata Open Forum, Sydney, Australia, May 2008

Invited keynote speaker, Validation of metadata extraction, CACIS, Hefei, PR China, July 2008

Invited panelist, IIS, NSF, Washington DC, Feb 2009

Invited speaker, Analysis of Energy Efficiency in Clouds, Hefei, PR China, Oct. 2009

Graduate seminar, Hefei, PR China, Oct. 2009

Invited panelist, IIS, NSF, Washington DC, Sept 2009

Invited program committee member for SERVICE COMPUTATION 2010, Jan 2010

External reviewer, Yu Ye PhD thesis, Hefei University of Technology, Hefei, PRC, Feb 2010

External Reviewer, Qatar National Science Foundation, April 2010

Invited presenter: Metadata extraction activities in CENDI organizations, CENDI, telecons, September 16 and 22, 2010

Invited keynote address, Keynote address: “Automated Metadata Extraction Services”, Services Computation 2010, Nov 2010, Lisbon, Portugal

Invited member, NSF Career panel, Dec 2010

Completed NIH course “Protecting Human Research Participants”, January 2011

Spaghetti Diagrams using Mobile Technology – presentation to CHDK VP and staff, Feb 2013

Invited presentation, ODU CS –CHKD Research Collaboration Opportunities , LEAN committee CHKD, March 2013

Invited presentation, Board CHKD, Norfolk, Aug. 15,2013, Spaghetti Diagrams using Mobile Technology

Grants

1974 Design of a Practical Detection and Recovery Scheme for Compilers of High Level Languages, 7/22 - 8/23, Summer Faculty Research Grants, 1 1/2 man-months, 2300.

1980 Equipment grant - Image Display Terminal, $22,690, (with W. Thompson).

1980 Computer Science Research Equipment Support Proposal - MEIS, $31,225.75, (with W.B. Thompson).

1980 Processing Methods on Cyber 20X machines, CDC, 1980-1984, $105,000, (with J.B. Rosen).

1981 Educational Enhancement Proposal - MEIS, $70,000 (with J.B. Rosen, S. Sahni).

1982 Equipment grant, HP 9836 systems, Hewlett-Packard, $145,000, (with W. Franta, S. Bruell).

1982 Equipment grant, MV8000, Data General, $300,000.

1984 Study of portable communication Transmission protocols, TITN, $24,000.

1984 Software Engineering with Databases, (with J. Carlis), $491,207, Data General + $45,000 matching University grant.

1984 National Research Service Award, NIH, $46460

1985 Local Area Networks for Automation, NTI, $60,000 (with David Du)

1985 Participant (but not principal investigator) of CER grant, NSF, `Experimental Research in Computer Algorithms', $3,622,190

1985 Equipment for Distributed System Laboratory, Bell Lab, $25,000 (with A. Tripathi)

1986 Metropolitan Area Networks, NTI, $40,000 (with D. Du)

1986 Lectures on Local Area Networks for Office Automation, National Academy of Sciences, $10,000

1987 Classification and Recall of Software Design in Support of Reusability, NASA and Navy, $80,122, (with C. Wild)

1988 An Integrated Research/Instructional Facility to Evaluate and Transfer Software Production Technologies, AT&T, $728,000, Equipment Grant, (with D. Harnage, C.M. Overstreet, C. Wild, D. Ray)

1988 An Extremely High Data Rate, Reliable Network, CIT, $80,865, (with R. Mukkamala, E. Foudriat)

1988 Photonic, Fault-tolerant Networks, NASA, $8,650

1988 A Maintenance Apprentice, $49,990, NASA and Navy, (with C. Wild)

1989 Lectures on Very High Speed Long Distance Networks, National Academy of Sciences, $10,000

1989 Decision Based Case Tools, $42,967, NASA (with C. Wild, S. Shen)

1989 High Speed Long Distance Networks, NASA, $30.918 (with C.M. Overstreet)

1989 An Extremely High Data Rate, Reliable Network, $93,171, CIT (with R. Mukkamala, E. Foudriat)

1989 An Extremely High Data Rate, Reliable Network, SUN, $94,100, (with R. Mukkamala)

1990 Parallel Communication, NASA, $19.997 (with C.M. Overstreet)

1990 High Speed Networking, SUN, $105,182 (with R. Mukkamala)

1990 Distributed Simulation, Taurus, $20,000 (with C.M. Overstreet)

1990 Reliable, High Performance Network Systems, CIT, $81,299 (with R. Mukkamala, E. Foudriat)

1991 A Reliable Gigabit Network Based on Parallelism, DAPRA, $162,400 (with C.M. Overstreet, R. Mukkamala, J. Wiencko, S. Midkiff)

1991 Parallel Communication, NASA, $20,000 (with C.M. Overstreet)

1991 High Speed Networking, SUN $180,985 (with R. Mukkamala)

1991 Network Management, SUN, $21,000

1991 Distributed Simulation, Taurus, $12,000 (with C.M. Overstreet)

1991 Reliable, High Performance Network Systems, CIT, $51,400 (with C.M. Overstreet, R. Mukkamala, E. Foudriat)

1992 Development of a Case Tool to Support Decision Based Software Development, CIT, $17,382 (with C. Wild)

1992 Development of a Case Tool to Support Decision Based Software Development, Unisys, $12,500 (with C. Wild)

1992 Development of a Case Tool to Support Decision Based Software Development, NASA, $12,500 (with C. Wild)

1992 Extremely High Data Rates, Reliable Network Systems Research ATM and Ethernet/FDDI Bridge and Support for TCP/IP over ATM LANs, NASA, $12,500, (with C.M. Overstreet),

1992 Long Haul Network, United Nations, India Expert Program, $10,000

1992 Computer Productivity Initiative, NSF, $107,761 (with C. Wild, D. Ray), matched with $139,568 from ODU

1992 High Speed Networking, SUN, $50,000 (with A. Gupta)

1993 Wide Area Technical Report Server, NSF, $22,736 (with E. Fox, J. French, A. Selman)

1993 High Speed Communication, United Nations, China visitor program, $5,000

1993 Computer Productivity Initiative, NSF, $107,761 (with C. Wild, D. Ray), matched with $139,568 from ODU

1993 Development of a Case Tool to Support Decision Based Software Development, NASA, $12,500 (with C. Wild)

1993 Extremely High Data Rates, Reliable Network Systems Research, NASA, $12,500, (with C.M. Overstreet)

1993 A Parallel and Distributed Computing Environment for Scientific Applications, NASA, $99,905 (with M. Zubair and C.M. Overstreet)

1994 Engineering Reliable Software Systems, NASA, $77,996, (with C. Wild, S. Zeil)

1994 An Interactive Information Exchange and Retrieval Tool, NASA, STTR, $100,000 (with H.A. Wahab)

1994 Technologies in Support of Distributed Simulation for Training and Instruction, ARPA, BMH, $50,000, (with C.M. Overstreet)

1994 Development of a Case Tool to Support Decision Based Software Development, Unisys, $8,090 (with C. Wild)

1994 Information Technology: A Tool to Cut Health Care Cost, NASA, $19,905 (with R. Mukkamala)

1994 CoReview: An Interactive Information Exchange and Retrieval Tool, CIT, $31,633 (with Hussein Abdel-Wahab)

1994 Support for TCP/IP over ATM LANs, NASA, $18,000, (with C. M. Overstreet)

1994 Research support for Computing, ICASE, $5,000, (with A. Gupta)

1995 Technologies in Support of Distributed Simulation for Training and Instruction, ARPA, BMH, $262,000, (with C.M. Overstreet)

1995 An Interactive Remote Instruction Testbed, NSF, $100,065, (with C.M. Overstreet)

1995 A Parallel and Distributed Computing Environment for Scientific Applications, NASA, $65,600 (with C. M. Overstreet)

1995 Collaborative Interactive Remote Instruction, Sun Microsystem, $78,560,(with C.M. Overstreet, H. Wahab)

1995 Graduate Fellowships in Computer Science, GAANN, DOE, $154,743, (with D. Keyes, S. Olariu, A. Pothen)

1995 Support for TCP/IP over ATM LANs, NASA, $18,000, (with C. M. Overstreet)

1995 Benchmarking the Automated Air Traffic Management System, NASA, $24,169

1995 Research support for Computing, ICASE, $14,000, (with A. Gupta)

1995 Distributed Informatics Access and Management, CEBAF, $40,000, (with R. Mukkamala)

1995 Engineering Reliable Software Systems, NASA, $70,900, (with C. Wild, S. Zeil)

1996 Interactive Remote Instruction, NSF, $259,746 (plus $179,368 match from ODU), (with C. M. Overstreet, H. Wahab, C. Wild)

1996 CoReview: An Interactive Information Exchange Retrieval Tool, $100,000, (with H. Abdel-Wahab, R. Mukkamala), STTR

1996 Technologies in Support of Distributed Simulation for Training and Instruction, ARPA, BMH, $150,000, (with C.M. Overstreet)

1996 Graduate Fellowships in Computer Science, GAANN, DOE, $119,000, (with D. Keyes, S. Olariu, A. Pothen)

1996 A Collaborative Authoring Tool for the Internet, CIT, $20,000, (with H. Abdel-Wahab, R. Mukkamala)

1996 NCSTRL: A National Computer Science Technical Report Library, NSF, $59,000, (with A. Selman, J. French, E, Fox)

1996 A Parallel and Distributed Computing Environment for Scientific Applications, NASA, $72,327 (with M. Zubair, C. M. Overstreet, A. Gupta)

1996 Distributed Privilege Access and Management, CEBAF, $32,000, (with R. Mukkamala, I. Levinstein, A.Gupta)

1996 High Quality Networks, NASA, $17,210

1996 Air Traffic Management. NASA, $18,200, (with C.M. Overstreet)

1996 Undergraduate Research - IRI, NSF, $17,768, (with C. M. Overstreet, H. Abdel-Wahab, C. Wild, A. Gupta)

1996 Admin-IRI Virtual Classroom, Sun Microsystems, $99,980, (with C. M. Overstreet, H. Abdel-Wahab, C. Wild, A. Gupta)

1997 Interactive Remote Instruction, NSF, $276,270 (plus $200,035 match from ODU), (with C. M. Overstreet, H. Wahab, C. Wild)

1997 CoReview: An Interactive Information Exchange Retrieval Tool, $100,000, (with H. Abdel-Wahab, R. Mukkamala), STTR

1997 Technologies in Support of Distributed Simulation for Training and Instruction, ARPA, BMH, $50,000, (with C.M. Overstreet)

1997 Distributed Informatics Access and Management, Jefferson Lab, $18,000, (with R. Mukkamala, I. Levinstein, A.Gupta)

1997 Graduate Fellowships in Computer Science, GAANN, DOE, $123,000, (with D. Keyes, S. Olariu, A. Pothen)

1997 Air Traffic Management. NASA, $18,200, (with C.M. Overstreet)

1997 Monitoring and Filtering for Distributed Systems, NASA, $17,200

1997 NCSTRL+ Design, NASA, $24,284

1997 Requirements Representation for Semi-automated Forces, Lockheed Marietta, $33,000, (with C. M. Overstreet, I. Levinstein)

1997 Secure Web Applications for Legacy Databases, Jefferson lab, $30,000, (with M. Zubair)

1998 NCSTRL+ and Usable Tools and Systems for NASA STI Mission, NASA, $75,103, (with M. Zubair, S. Shen)

1998 Interactive Remote Instruction, NSF, $242,916 (plus $112,386 match from ODU), (with C. M. Overstreet, H. Wahab, C. Wild)

1998 Undergraduate Research - IRI, NSF, $17,768, (with C. M. Overstreet, H. Abdel-Wahab, C. Wild, A. Gupta)

1998 Automated Content Synthesis for Interactive Remote Instruction, Sun Microsystems, $105,385, (with C. M. Overstreet, H. Abdel-Wahab, C. Wild, A. Gupta)

1998 Graduate Fellowships in Computer Science, GAANN, DOE, $123,000, (with D. Keyes, S. Olariu, A. Pothen

1998 Digital Libraries for Science Education, NSF, $80,355, (with M. Zubair, S. Shen)

1998 Secure Web Applications for Legacy Applications, Jefferson Lab, $27,017, (with M. Zubair)

1999 IRI for industry, COX Comm., $20,000, (with A. Gupta)

1999 NCSTRL+ and Usable Tools and Systems for NASA STI Mission, NASA, $105,603, (with M. Zubair, S. Shen)

1999 Universal Preprint Service, Los Alamos NL, $25,000, (with M. Zubair)

1999 Automated cataloguing and DL, JTASC, $87,200, (with M. Zubair)

1999 Interactive Remote Instruction, NSF, $157,198, (with C. M. Overstreet, H. Wahab, C. Wild, A. Gupta)

1999 Graduate Fellowships in Computer Science, GAANN, DOE, $123,000, (with D. Keyes, S. Olariu, A. Pothen)

1999 Secure Web Applications for Legacy Databases, Jefferson lab, $5,200, (with M. Zubair)

2000 Undergraduate Research - IRI, NSF, $17,768, (with C. M. Overstreet, H. Abdel-Wahab, C. Wild, A. Gupta)

2000 Adaptive Web-based Learning in Support of Transfer Students, NSF, $90,293 (participant with C. Wild, M. Zubair, S. Toida)

2000 Linux Router Project, Landmark, $35,000, (with M. Zubair, A. Gupta)

2000 Graduate Fellowships in Computer Science, GAANN, DOE, $123,000, (with D. Keyes, S. Olariu, A. Pothen)

2000 NCSTRL+ and Usable Tools and Systems for NASA STI Mission, NASA, $108,612, (with M. Zubair, S. Shen)

2000 Automated cataloguing and DL, JTASC, $21,244, (with M. Zubair)

2000 An Interoperable Platform Independent Digital Library for COMPTEVOR (US Navy)", Comptevor US Navy, $75,000 (with M. Zubair)

2000 Web Applications for e-commerce, Jefferson lab, $26,452

2000 Technical Report Interchange. Los Alamos National lab, $35,520, (with M. Zubair)

2001 Graduate Fellowships in Computer Science, GAANN, DOE, $123,000, (with D. Keyes, S. Olariu, A. Pothen)

2001 Automated cataloguing and DL, JTASC, $85,500, (with M. Zubair)

2001 An Interoperable Platform Independent Digital Library for COMOPTEVOR (US Navy)", Comoptevor US Navy, $44,000 (with M. Zubair)

2001 Technical Report Interchange. NASA Langley and Phillips Air Force lab, $104,678, (with M. Zubair)

2001 Digital Library - TRI, NASA, (with M. Zubair), $179,000

2001 NCSTRL - OAI realization, CIT, (with M. Zubair, E. Fox, J. French, M. Nelson), $30,000

2001 NSDL - An OAI-compliant Physics digital library for NSDL, NSF, $225,478

2001 Web Applications for e-commerce, Jefferson lab, $29,875

2002 TRI, Los Alamos National Lab, (with M. Zubair), $34,959

2002 TRI, Sandia National Lab, (with M. Zubair), $34,959

2002 An Interoperable Platform Independent Digital Library for COMPTEVOR (US Navy)", Comptevor US Navy, $72,000 (with M. Zubair)

2002 Kepler - A Communal Digital Library, NSF, $250,000, (with M. Zubair, M. Nelson)

2002 NSDL - An OAI-compliant Physics digital library for NSDL, NSF, $254,229, (with M. Zubair, M. Nelson)

2002 An Interoperable Platform Independent Digital Library for COMPTEVOR (US Navy)", Comptevor US Navy, $14,200 (with M. Zubair)

2002 Digital Library - TRI, NASA, (with M. Zubair), $189,900

2002 Oracle E-business applications and High Performance Computing., SUN Microsystems, (with A. Gupta), $69,500

2003 NSDL - An OAI-compliant Physics digital library for NSDL, NSF, $254,229, (extension; with M. Zubair, M. Nelson)

2003 Kepler - A Communal Digital Library, NSF, $250,000, (with M. Zubair, M. Nelson)

2003 Digital Library - TRI, Sandia, (with M. Zubair), $12,000

2003 A self-sustainable Digital Library for Evolving Communities, NSF, $152,000, (with M. Zubair)

2004 NSDL - An OAI-compliant Physics digital library for NSDL, NSF, $254,229, (extension; with M. Zubair, M. Nelson)

2004 Aggregating, Integrating, Preserving, and Enhancing the NASA Digital Information Framework, NASA, $240,000, (with M. Zubair, M. Nelson, J. Bollen)

2004 Tools For Extracting Metadata And Structure From Dtic Technical Documents Collections Using Xml Technology, DTIC, $50,000, (with M. Zubair)

2004 Enhancing Infrastructure for OAI, Andrew Mellon Foundation, $121,364, (with M. Zubair, M. Nelson)

2004 Dynamic Distributed Access Control Management System for a Federated Digital Library Based on IBM Autonomic Policy Framework, IBM, $40,000, (with M. Zubair, R. Mukkamala), Research Excellency Award

2004 Kepler - A Communal Digital Library, NSF, $200,000, (with M. Zubair, M. Nelson)

2004 A self-sustainable Digital Library for Evolving Communities, NSF, $147,000, (with M. Zubair)

2005 Aggregating, Integrating, Preserving, and Enhancing the NASA Digital Information Framework, NASA, $40,000, (with M. Zubair, M. Nelson)

2005 Tools For Extracting Metadata And Structure From Dtic Technical Documents Collections Using Xml Technology, DTIC, $94,000, (with M. Zubair, S. Zeil)

2005 Enhancing Infrastructure for OAI, Andrew Mellon Foundation, $121,364 (continuation), (with M. Zubair, M. Nelson)

2005 Kepler - A Communal Digital Library, NSF, $200,000 (continuation), (with M. Zubair, M. Nelson)

2005 A self-sustainable Digital Library for Evolving Communities, NSF, $147,000 (continuation), (with M. Zubair)

2005 Dynamic Distributed Access Control Management System for a Federated Digital Library Based on IBM Autonomic Policy Framework, IBM, $40,000, (with M. Zubair, R. Mukkamala), Research Excellency Award

2006 Enhancing Infrastructure for OAI, Andrew Mellon Foundation, $121,364 (continuation), (with M. Zubair, M. Nelson)

2006 Kepler - A Communal Digital Library, NSF, $200,000 (continuation), (with M. Zubair, M. Nelson)

2006 A self-sustainable Digital Library for Evolving Communities, NSF, $147,000 (continuation), (with M. Zubair)

2006 Tools For Extracting Metadata And Structure From Dtic Technical Documents Collections Using Xml Technology, DTIC, $94,000, (continuation), (with M. Zubair, S. Zeil)

2006 A Prototype of the Human Virus Interactome Resource(HVIR), (with A. Pothen, *M. Zubair,* C. Osgood, O. Semmes *)*, $95,000, ODU

2006 Extracting Metadata And Structure From NASA Technical Documents Collections, NASA, $34,000, (with M. Zubair, S. Zeil)

2006 Automating IT Infrastructure Management Processes in a Typical University Environment, IBM, $40,000, (with M. Zubair, R. Mukkamala), Research Excellency Award

2006 Metadata and OAI, DTIC, $7,000, (with M. Zubair)

2007 Kepler - A Communal Digital Library, NSF, $200,000 (continuation), (with M. Zubair, M. Nelson)

2007 Extracting Metadata And Structure From NASA Technical Documents Collections, NASA, $34,000 (continuation), (with M. Zubair, S. Zeil)

2007 Automating IT Infrastructure Management Processes in a Typical University Environment, IBM, $40,000, (continuation) (with M. Zubair, R. Mukkamala), Research Excellency Award

2007 Tools For Extracting Metadata And Structure From Dtic Technical Documents Collections Using Xml Technology, DTIC, $16,828, (continuation), (with M. Zubair, S. Zeil)

2007 Autonomic Approach to Change Management and Reservation of IT Resources in a Virtual Computing Lab Environment, IBM, $25,000, (with M. Zubair, R. Mukkamala), Research Excellency Award

2007 Collaborative Classification of Large, Growing Collections with Evolving Facets, NSF, $147,573, (with H. Wu, M. Zubair)

2007 Processes and Tools For Extracting Metadata, DTIC, $54,726, (with M. Zubair, S. Zeil)

2007 Automated Extracting of Metadata for GPO, DTIC, $84,700, (with M. Zubair, S. Zeil)

2008 Processes and Tools For Extracting Metadata, DTIC, $84,371, (with M. Zubair, S. Zeil)

2008 Autonomic Approach to Change Management and Reservation of IT Resources in a Virtual Computing Lab Environment, IBM, $25,000 (continuation), (with M. Zubair, R. Mukkamala), Research Excellency Award

2008 Collaborative Classification of Large, Growing Collections with Evolving Facets, NSF, $128,067, (with H. Wu, M. Zubair)

2008 Automated Extracting of Metadata for GPO, DTIC, $64,906, (with M. Zubair, S. Zeil)

2008 Marc21 Representation of Metadata, $15,000,DTIC, (with M. Zubair, S. Zeil)

2009 Collaborative Classification of Large, Growing Collections with Evolving Facets, NSF, $127,914, (with H. Wu, M. Zubair)

2009 Automated Extracting of Metadata for GPO, DTIC, $64,906, (with M. Zubair, S. Zeil)

2009 Processes and Tools For Extracting Metadata, DTIC, $84,371, (with M. Zubair, S. Zeil)

2009 REU- Collaborative Classification of Large, Growing Collections with Evolving Facets, NSF, $16,000 (with H. Wu, M. Zubair)
2010 Processes and Tools For Extracting Metadata, DTIC, $84,371, continuation, (with M. Zubair, S. Zeil)

2010 Collaborative Classification of Large, Growing Collections with Evolving Facets, NSF, $127,914, continuation, (with H. Wu, M. Zubair)

2010 REU- Collaborative Classification of Large, Growing Collections with Evolving Facets, NSF, $16,000 continuation, (with H. Wu, M. Zubair)

2010 Exploring Social Classification on Microsoft Azure, NSF, $80,702 (with H. Wu, M. Zubair)

2011 Exploring Social Classification on Microsoft Azure, NSF, $80,702 continuation (with H. Wu, M. Zubair)

2011 REU- Collaborative Classification of Large, Growing Collections with Evolving Facets, NSF, $16,000 continuation, (with H. Wu, M. Zubair)

2014 Spaghetti Diagrams using Mobile Technology, (CHKD - $52,500, Education Foundation - $12,500, ODU match – $40,000), (with Tamer Nadeem, Ajay Gupta, Sandip Godambe, Arno Zaritsky)

2014 Using a scaffolding-based blogging approach to improve IT and CS undergraduate students' disciplinary writing skills, ODU IDW, $19,000, (with Wu, Harris, and Xu, Li and Wu, He)

2016 AIT-ODU Summer research workshop, AIT, $25,000, (with A. Gupta)

2017 AIT-ODU Summer research workshop, AIT, $30,000, (with A. Gupta)

2018 AIT-ODU Summer research workshop, AIT, $35,000, (with A. Gupta)

2019-2024 AIT-ODU Summer research workshop, AIT, $48,000 each year, (with A. Gupta)

2020- 2023 Effects of CBD Oil on Agitation in Patients with Alzheimer's Disease, Ananda, $389,846, (with H. Okhravi, A. Gupta, C. Nesbitt, S. Jain)

2021 The Effects of an Aerobic Exercise Regimen on Sleep Quality, Quantity and Stress Level in COVID-19 Health Professionals: A Feasibility Study, HADSI, $24,961, (with H. Okhravi, A. Gupta, C. Nesbitt)

2023-2024 VSORTS - Culturally Responsive Solutions, NSF SBIR Phase 1, $50,400, (with Dwayne Cormier, Ajay Gupta)

2023 Call Centers and Generative AI, MAP, $30,000, (with J. Cheng, T. Nadeem, M. Herzog, A. Gupta, G. Vikas)

PhD Students

Ketabchi, Mohammad, On the Management of Computer Aided Design Databases for CAD, December 1985, Santa Clara University

Sharrock, Suzanne, Mechanisms for Integrated Voice, Data, and Video in LAN-based systems, July 1987, (co-advisor with D. Du) Carlton College

Game, David, Performance Improvements for FDDI and CSMA/CS Protocols, December 1990, Christopher Newport University

Paterra, Frank, Parallel Transport Protocols in Support of Remote Visualization, December 1991, CTA Inc, (co-advisor with C.M. Overstreet)

Khanna, Sanjay, Parallel Network Systems, August 1993, IBM

Shubhangi, Kelkar, A Parallel and Distributed Environment for Scientific Applications, Dec. 1996 (co-advisor with M. Zubair), General Dynamics

Dharanikota, Sudheer, Quality of Service Architecture for Native TCP/IP Over ATM Networks, Raytheon, May 1996

Roberts, Cathy, A Decision-Based Environment for Project Management, May 98, Roberts,Inc., (co-advisor with C. Wild)

Alaa Youssef, A Quality of Session Control Framework for Multimedia Multicast Systems, August 98, IBM TJ Watson, (co-advisor with H. Wahab)

Ehab S. Al-Shaer, Hierarchical Filtering-Based Monitoring Architecture for Large-Scale Distributed Systems, August 98, DePaul University, (co-advisor with H. Wahab)

Michael Nelson, Smart Objects and Dumb Archives: Using Buckets in Digital Libraries, August 2000, NASA Langley/University of North Carolina, Chapel Hill

Dave Cavitt, An Architectural Framework for Performance Analysis: supporting the Design, Configuration, and Control of DIS/HLA Simulations, Dec 2000, BMH (co-advisor with C.M. Overstreet)

Xiaoming Liu, Federating Heterogeneous Digital Libraries by Metadata Harvesting, (co-advisor M. Zubair), Dec. 2002, Postdoc at Los Alamos National Lab

Mohamed Kholief, Event-based retrieval from digital libraries containing data streams, (co-advisor S. Shen), Dec. 2003, California University of Pennsylvania

Anan Hesham, A 3D Digital Library for Compressed 3D Models, (co-advisor M. Zubair), Dec 2004, ECPI

Rong Shi, A Lightweight Federation of Interoperable Digital Libraries, (co-advisor with M. Zubair), May 2005, Reynolds&Reynolds

Jianfeng Tang, Template-based Metadata Extraction for Heterogeneous Collection, (co-advisor M. Zubair), Dec 2006, University of Illinois, research scientist

Amrou Ashraf, Freelib: A Self-Sustainable Peer-To-Peer Digital Library Framework For Evolving Communities, (co-advisor M. Zubair), Dec 2007, Old Dominion University, research scientist

Paul Flynn, Document Classification in Support of Automated Metadata Extraction from Heterogeneous Collections (co-advisor with S. Zeil), April 2014, Applied Research Associates

Hui Shi, Scalable Reasoning for Knowledge Bases Subject to Changes, (co-advisor S. Zeil), August 2014, University of Southern Indiana

Postdoc

Francis Jayakanth, IISC, Bangalore, India, Fullbright Scholar, 2004-05.

Summary of Interest Areas

I am currently interested in the research areas of digital libraries, very high-performance networks, and Internet resource access.

Collaborators

Los Alamos National Laboratory, Unites States Geological Society, University of Melbourne, Open Language Archives Community, NASA Langley, Jefferson Lab, CERN, Emory University, IIT Dehli, IISC Bangalore, Virginia Tech, Raytheon, American Physical Society, IBM TJ Watson Research Lab

Patents

(1) ``**Cont**rol Access Through Local Carrier Sensing for High Data Rate Networks and Control of Access of Synchronous Messages Through Circulating Reservation Packets", (with E. Foudriat, C.M. Overstreet, F. Paterra, S. Khanna), U.S. Patent No. 5,229,993, 7/20/93

(2) “System, Method, and Computer Program for Coordinated Browsing”, (with M. Zubair), 5/28/99, Provisional Patent Application; source license, non-exclusive, sold to Neteffect (which was bought by Ask Jeeves), Nov. 1999

Refereed Journals and Books

(1) ``Software Paging in an Interpretive Environment", International Journal of Computer Mathematics, Vol. IV, pp. 69-75, December 1974 (also Tech. Rep. 73-4)

(2) ``A Programming Style", International Journal of Computer Mathematics, Vol. IV, pp. 309-325, August 1975

(3) ``Compressed Tries", Communications of ACM, 19, 7, pp. 409-415, July 1976 (also Tech. Rep. 74-12)

(4) ``A Multilevel Flow Control Statement", International Journal of Computer Mathematics, (with W.R. Franta, also Tech. Rep. 74-20), Vol. V, pp. 297-307

(5) ``An Efficient Data Structure for the Event Set", Communications of ACM, August 1977, (with W.R. Franta), pp. 596-602

(6) ``A Framework for Investigating a Class of Distributed Processing Algorithms", IEEE Transactions on Systems, Man and Cybernetics, August 1977, pp. 597-604, (with W.R. Franta)

(7) Fundamentals of the Computing Sciences, 512 p., Prentice-Hall, 1978 (with A. Hanson)

(8) Supplement to Fundamentals of the Computing Sciences, 354 p., Prentice-Hall, 1978 (with A. Hanson)

(9) ``A Note on Virtual Memory Indexes", Communications of ACM, (also Tech. Rep. 77-9), September 1978, pp. 786-787

(10) ``A Comparison of HEAPS of the TL Structure for the Simulation Event Set", Communication of ACM, (with W.R. Franta, also Tech. Rep. 77-19), October 1978, pp. 873-875

(11) ``On the Representation of the Simulation Event Set", Communications of ACM, (with W.R. Franta), Technical Correspondence, March 1980

(12) ``Algorithms", Computer Handbook, Van Nostrand Reinhold Corp, pp. 805-815, 1984

(13) ``A Framed, Movable-Boundary Protocol for Integrated Voice/Data in a LAN", Computer Communications Review, special SIGCOMM issue, Vol. 16, No 3, pp. 111-119, August 1986, (with S. Sharrock, S. Ghanta, H. Du), same as II, 11

(14) ``Dynamic Resource Allocation in a Metropolitan Network", Computer Communications Review, special SIGCOMM issue, Vol. 18, No. 4, pp. 13-24, August 1988, (with C.M. Overstreet, Xiao- ping Qui, Deqing Tang), same as II, 14.

(15) ``An Efficient File Structure for Document Retrieval in the Automated Office Environment", IEEE, Transactions on Data and Knowledge Engineering, (with H. Du, S. Ghanta, S. Sharrock), Vol. 1 No. 2, July 1989, pp. 258-273

(16) ``A Framed, Movable-Boundary Protocol for Integrated Voice/Data in a LAN", Computer Networks & ISDN, (with S. Sharrock, S. Ghanta, H. Du), Vol. 18, No. 1, pp. 1-19, November 1989

(17) ``Decision-Based-Support-Paradigm: A New Method to Structure Source Code" (with C. Wild, L. Liu), Journal of Software Maintenance, pp. 17-43, March 1991

(18) ``A Carrier Sensed Multiple Access Protocol for High Data Rate Ring Network" (with E.C. Foudriat, C.M. Overstreet, S. Khanna, F. Paterra), Computer Communications Review, pp. 59-70, April 1991

(19) ``Dynamic Allocation of Bandwidth in Multichannel Metropolitan Area Networks'' (with E.C. Foudriat, D. Game, R. Mukkamala, C.M. Overstreet), Computer Networks & ISDN Systems 25 (1992), pp. 203-223

(19a) “Building a Phased, Structured Approach to Reengineering Legacy Software Systems”, (with Tammy Taylor, Frank Sparks, Chris Wild), Crosstalk The Journal of Defense Software Engineering, Sept. 1994

(20) Academic Careers for Experimental Computer Scientists and Engineers, p. 139, National Academy Press, Washington, D.C., 1994, Co-author (with L. Snyder, F. Baskett, M. Carroll, D. Coleman, D. Estrin, M. Furst, J. Hennessy, H.Kung, B. Reid)

(21) ``Average Waiting Time Profiles of Uniform Distributed Queue Dual Bus System Model'' (with N. Rao, S. Olariu, S. Dharanikota, L. Zhang, D. Game), IEEE Trans. Parallel and Distributed Systems, 6, (1995), 1068 - 1084

(22) ``Wide Area Technical Report Service - Technical Reports Online'' (with J. French, E. Fox, A. Selman), Communications of the ACM, p.45, April 1995

(23) "Mosaic + XTV = CoReview" (with H. Abdel-Wahab, R.Mukkamala, A. Gupta, A. Prabhu), Computer Networks and ISDN systems, Vol. 27, No. 6, pp. 849-860, April 1995

(24) High Performance Networking VI, 378 p., Chapman & Hall, 1995, Edited by Ramon Puigjaner: "Performance Trade-offs for a Multimedia Distributed Application", (with C.M. Overstreet, H. Abdel-Wahab, A. Gupta, Muthu Kumar, R. Srivastava), pp. 181-195, see also II,60

(25) State-of-the-art in Performance Modeling and Simulation: Advanced Computer Systems, Gordon and Breach, Edited by Kallol Bagchi, 1996, "Modeling and Distributed Simulation Techniques for Synthetic Training Environments", (with D. Cavitt, C.M. Overstreet), pp. 194-218

(26) Testing of Communication Systems 361 p., Chapman & Hall, Sept. 1996, Edited by Bernd Baumgarten and Heinz-Jurgen Burkhardt: A Workstation's Communication Performance Benchmark", (with A. Gupta, S. Mynam), pp. 60-76,see also II, 70

(27) Advanced IT Tools, 566p., Chapman & Hall, Sept. 96, Edited by Nobuyoshi Terashima and Edward Altman: "PMS: Privilege Management System for Secure Distributed Resource Sharing" (with A. Gupta,B. Kvande, I.B. Levinstein, R. Mukkamala, M. Olson, R. Chambers, R. Whitney) pp. 348-355, see also II, 71

(28) “Interactive Remote Instruction: Lessons Learned" (with C. Wild, C.M. Overstreet, H. Abdel-Wahab, A. Gupta, A. Youssef, E. Stoica, R. Talla, A. Prabhu), Journal of Networks and Computer Applications, Oct. 96,(20:4), pp. 395-404

(29) Implementing Systems for Supporting Management Decisions, Chapman & Hall, Sept. 96, Edited by P. Humphreys, L. Bannon, A. McCosh, P. Migliarese and J.C. Pomerol: Processes for Managing Project Uncertaintity with Contingency Planning" (with C. Roberts, C. Wild), pp. 352-365, see also II, 64

(29) “Interactive Distance Learning over Intranets", (with H. Abdel-Wahab, C.M. Overstreet, C. Wild, A. Gupta, A. Youssef, E. Stoica, E. Al-Shaer and R. Talla), IEEE Journal of Internet Computing, Vol. 1, 1, Jan. 97, pp. 60-71

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(6) Workshop on the Architecture and Implementation of High Performance Communication Subsystems, Tucson, AZ, February 1992

(7) International Workshop on Advanced Communications and Applications for High Speed Networks 91, Munich, March 1992

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