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Education

- 1974-76 *Ph.D. in Computer and Information Sciences.* University of Pennsylvania, Philadelphia, Pennsylvania. Dissertation title: *Program Control Restructuring—A Software Engineering Methodology.* Degree granted in August 1976.
- 1974 *Master of Science for Graduate Work in Computer and Information Sciences.* University of Pennsylvania. Degree granted in May 1974.
- 1971-73 *Bachelor of Science in Computer Science and Engineering.* University of Pennsylvania. Degree granted in December 1973, *Summa Cum Laude.*
Fulbright Scholarship.

Professional Experience

EMPLOYMENT HISTORY

- 2008- Chair, Department of Computer Science and Engineering
- 2002-07 Chair, Department of Computer Science and Engineering
- 1997-02 Chair, Department of Computer Science, Washington University in St. Louis.
- 2004- Harold B. and Adelaide G. Welge Professor of Computer Science.
- 1990-04 Professor of Computer Science, Washington University in St. Louis.
- 1981-90 Associate Professor of Computer Science, Washington University in St. Louis.
- 1976-81 Assistant Professor of Computer Science, Washington University in St. Louis.

OTHER SIGNIFICANT RESPONSIBILITIES

- 2004-05 Chair, Assembly Series Committee.
- 1997- Director and founder of the Mobile Computing Laboratory, Department of Computer Science, Washington University in St. Louis.
- 1990-97 Director and founder of the Computer Visualization Laboratory, Department of Computer Science, Washington University in St. Louis.
- 1989-97 Chair, Doctoral Program Committee, Department of Computer Science, Washington University in St. Louis.

VISITING POSITIONS

- 1994 Guest Scientist, Siemens AG, Corporate Research and Development, Munich, Germany. (Jul.-Aug. 1994.)
- 1999 Visiting Scientist, LORIA CNRS, Université Henri Poincaré, Nancy France. (Jul. 1999.)

Honor Society Memberships, Professional Associations

Tau Beta Pi

Association for Computing Machinery (ACM)

Institute of Electrical and Electronics Engineers (IEEE) Computer Society.

Professional Service

EDITORIAL BOARDS

- 2002-04 Roman, G.-C., Member of the Editorial Board of the *ACM Transactions on Software Engineering and Methodology*.

JOURNALS AND CONFERENCES

- 2006 Ochoa, S. F., and Roman, G.-C., Program Co-Chairs, *International Workshop on Advanced Software Engineering (IWASE 2006)*, Santiago, Chile, August 25, 2006.
- 2005 Roman, G.-C., General Chair, *International Conference on Software Engineering (ICSE'05)*, Saint Louis, Missouri, May 15-21, 2005.
- 2003 Roman, G.-C., Vice Chair for Agents and Mobile Code, *23rd International Conference on Distributed Computing Systems (ICDCS)*, May 19-22, 2003.
- 2002 Roman, G.-C., and Murphy, A. L., Guest Editors, Special Issue on Software Engineering for Mobility, *Automated Software Engineering* 9, No. 2, Kluwer Academic Publishers, April 2002.
- 2001 Roman, G.-C., and Picco, G. P., Co-Chairs, *Workshop on Software Engineering and Mobility*, organized in conjunction with *International Conference on Software Engineering (ICSE'01)*, Toronto, Canada, May 13-14, 2001.
- 2000 Porto, A., and Roman, G.-C., Program Co-Chairs, *International Conference on Coordination Models and Languages (Coordination 2000)*, Cyprus, September 11-13, 2000.
- 1998 Roman, G.-C., and Ghezzi, C., Guest Editors, Special Issue on Mobility and Network Aware Computing, *IEEE Transactions on Software Engineering* 24, No. 5, May 1998.
- Ghezzi, C., and Roman, G.-C., Co-Chairs, *Workshop on Computing and Communication in the Presence of Mobility*, organized in conjunction with *International Conference on Software Engineering (ICSE'98)*, Kyoto, Japan, April 25, 1998.
- Roman, G.-C., Panel Chair, *Computing and Communication in the Age of Mobility*, organized in conjunction with *International Conference on Software Engineering (ICSE'98)*, Kyoto, Japan, April 1998.
- 1997 Roman, G.-C., and Ghezzi, C., Co-Chairs, *Workshop on Mobility and Network Aware Computing*, organized in conjunction with *Sixth European Software Engineering Conference (ESEC)*, Zurich, Switzerland, September 26, 1997.
- 1993 Ghezzi, C., and Roman, G.-C., Guest Editors, Selected Papers of the Sixth International Workshop on Software Specification and Design, *Science of Computer Programming* 20, No. 1-2, April 1993.

- 1991 Ghezzi, C., and Roman, G.-C., Program Co-Chairs, *Sixth International Workshop on Software Specification and Design*, 25-26 October 1991, Como, Italy.

LOCAL COMMUNITY

- 2006- Saint Louis Coalition for Information and Communications Technologies, founding member and member of the Board of Directors.
- 2002- Emerging Technologies Advisory Board, Saint Louis Science Center.
- 1996-97 Technology Advisory Council, Saint Louis Science Center.
- 1993 Founder of the Saint Louis area *Software Process Improvement Network (SPIN) Chapter*.

CONFERENCE STEERING COMMITTEES

International Conference on Coordination Models and Languages
 International Conference on Software Engineering
 International Workshop on Software Specification and Design

PROGRAM COMMITTEES

IEEE Symposium on Visual Languages
 International Conference on Coordination Models and Languages
 International Conference on Data Engineering
 International Conference on Distributed Computing Systems
 International Conference on Information Processing in Sensor Networks
 International Conference on MOBILE Wireless MiddleWARE, Operating Systems, and Applications
 International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing
 International Conference on Software Engineering
 International ICDCS Workshop on Mobile Computing Middleware
 IEEE Real-Time Systems Symposium
 International Workshop on Formal Methods for Parallel Programming
 International Workshop on Advanced Software Engineering
 International Workshop on Foundations of Coordination Languages and Software Architectures
 International Workshop on Software Specification and Design
 International Workshop on Software Engineering for Large-Scale Multi-Agent Systems
 Fundamental Approaches to Software Engineering
 SIGSOFT Symposium on the Foundations of Software Engineering
 Workshop on Reflective and Adaptive Middleware
 Workshop on Self-Healing Systems
 Workshop on Software Engineering for Pervasive Computing Applications, Systems, and Environments
 The First International Workshop on Software Architectures and Mobility (SAM 2008), a ICSE 2008 Workshop

Workshop on Multi-Agent Systems and Software Architecture (MASSA 2008), a ICSE 2008 Workshop

IEEE WETICE Workshop on Coordination Models and Applications (CoMA): Knowledge in Pervasive Environments

REVIEWER

National Science Foundation

National Institutes of Health

Major conferences and journals in the fields of software engineering, mobility, distributed computing, and visualization

Research funding agencies in Europe and elsewhere

Subjects Taught

Classes I like to teach are progressive and exhibit conceptual integrity, i.e., a unifying theme or vision. I believe that interesting homework assignments and personal attention are the key to a quality education. When first taught in the seventies, the programming systems and languages class anticipated the contents of modern language texts by almost a decade. The software engineering workshop is one of the first classes of its kind; it maintained its freshness and relevance because of its strong grounding in the realities of industrial software development. My contributions to the concurrency curriculum seek to bridge the gap between formal methods and current design practices.

Software engineering workshop

Models of concurrency

Distributed algorithms

Concurrent algorithms and formal verification

Programming systems and languages

Programming language theory

Computer graphics

Compilers

Automata and formal languages

Introductory computer science

2002 European Educational Forum (EEF) International Summer School (Turku, Finland): Mobile UNITY—Reasoning about Physical and Logical Mobility

2001 Winter School (Universidad de Buenos Aires, Argentina): Formal Reasoning about Concurrent and Mobile Systems in UNITY and Mobile UNITY

Dissertations Supervised

Doctoral research is academic education at its very best. There are few more satisfying forms of teaching: a one-on-one apprenticeship that enhances knowledge of student and teacher alike; an intense effort motivated by a self-constructed vision; and a gradual refinement of taste and style in choosing problems and solution strategies. As chair of the Doctoral Program Committee, I was able to establish a culture in which every doctoral student has the opportunity to excel, understands the high expectations of our department, and makes continuous progress toward completing the degree requirements. At the personal level, I have focused my efforts on educating a new generation of graduate students likely to succeed in academia and top-ranked national research centers.

List of graduates and initial placement after graduation:

2008 Sen, R., (Co-Advisor with: Chris Gill) *Supporting Collaborations Across Mobile Environments*. (Advisory Forensic Services, PricewaterhouseCoopers LLP, New York, New York)

- Bhattacharya, S., (Co-Advisor with: Chenyang Lu) *Achieving Application Quality of Service in Resource-Constrained Wireless Sensor Networks*. (Researcher at Intel India System Research Center, Bangalore, India)
- 2006 Payton, J., *A Query-Centric Perspective to Supporting the Development of Context-Aware Applications for Mobile Ad Hoc Networks*. (Assistant professor at University of North Carolina at Charlotte, Charlotte, North Carolina.)
- 2005 Handorean, R., *Context Aware Service Oriented Computing in Mobile Ad Hoc Networks*. (Software Engineer at Qualcomm, Boulder, Colorado.)
- 2004 Julien, C., *Supporting Context-Aware Application Development in Ad Hoc Mobile Networks*. (Assistant professor at University of Texas, Austin, Texas.)
- 2003 Huang, Q., (Co-Advisor with: Chenyang Lu) *Spatiotemporal Multicast and Partitionable Group Membership Service*. (Research scientist at Palo Alto Research Center (PARC), Palo Alto, California.)
- 2002 Tudoreanu, M.-E., (Co-Advisor with: E. Kraemer) *Economy of Interaction for Effective Program Visualizations*. (Assistant professor at University of Arkansas, Little Rock, Arkansas.)
- 2000 Hart, D., *Query-Based Visualization of Executing Distributed Computations*. (Assistant professor at University of Alabama, Huntsville, Alabama.)
- Murphy, A. L., *Rapid Development of Dependable Applications in Ad Hoc Mobility*. (Assistant professor at University of Rochester, Rochester, New York.)
- 1998 Picco, G. P., (Co-Advisor with: S. Gai and C. Ghezzi) *Understanding, Evaluating, Formalizing, and Exploiting Code Mobility*, Politecnico di Torino. (Visiting assistant professor at Washington University in Saint Louis, assistant professor at Politecnico di Milano, Italy.)
- 1997 McCann, P. J., *Reasoning About Program Interactions in the Presence of Mobility*. (Lucent Bell Laboratories Research, Naperville, Illinois.)
- 1995 Plun, J. Y., *Expressing Dynamic Interaction Patterns in Concurrent Programming*. (Postdoctoral fellow at Washington University in Saint Louis.)
- 1994 Wilcox, C. D., *Addressing Architectural and Mobility Considerations in the Formal Specification and Design of Concurrent Systems*. (Radworks Corp., San Antonio, Texas.)
- 1993 Cox, K. C., *Visualization of Concurrent Computations*. (AT&T Bell Laboratories Research, Naperville, Illinois.)
- 1992 Gamble, R. F., (Adviser: W. E. Ball) *Developing Reliable, Concurrent Rule-Based Programs*. (Assistant professor at University of Tulsa, Tulsa, Oklahoma.)
- 1989 Laine, A. F., *High-Speed Feature-Based Stereo Matching*. (Assistant professor at University of Florida, Gainesville, Florida.)
- Cunningham, H. C., *The Shared Dataspace Approach to Concurrent Computation: The Swarm Programming Model, Notation, and Logic*. (Assistant professor at University of Mississippi, Oxford, Mississippi.)

Research Support

- 2008 “Wireless Sensor Network Technology for Clinical Monitoring,” ICTS Novel Methodologies and Pilot Studies award under the NIH/NCRR (NIH RR024992-01) grant. (Feb. 2008 - Jan. 2009, C. Lu (PI), T. Bailey, and G.-C. Roman, \$80,000)
- “CSR-DMSS: A Substrate for Personalized Computing in the Real World,” NSF research grant. (CSR-tbd, Sept. 1 2008 – Aug. 31 2011, G.-C. Roman (PI) and C. Gill, \$360,000)
- “Wireless Communication Study,” Emerson unrestricted gift. (C. Lu (Co-PI) and G.-C. Roman (Co-PI), \$30,000)

- 2007 “Washington University Institute of Clinical and Translational Sciences,” NIH/NCRR grant. (NIH RR024992-01, Sept. 2007 - May 2012, Kenneth Polanski (PI) et al, (Co-Director Novel Methodologies and Pilot Studies Program with 5% support), \$50,000,000)
- “Towards Cyber-Physical Computing at Scale: A Life-Size Experimental Facility for Applied Sensor Networks Research,” NSF instrumentation grant collaborative with UIUC and University of Nebraska-Lincoln. (C. Lu (PI) and G.-C. Roman, \$400,000 with \$100,000 for Washington University)
- 2005 “Adaptive Systems for Collaboration in Multi-mode Mobile Environments,” NSF research grant. (IIS-0534699, Dec. 2005 - Nov. 2008, G.-C. Roman (PI) and C. Gill, \$754,000; additional REU funding of \$12,000)
- 2005 “NeTS-NOSS: Fluid Software Infrastructure for Wireless Sensor Networks,” NSF research grant. (CNS-0520220, Aug. 2005 - July 2008, G.-C. Roman (PI) and C. Lu, \$300,000)
- 2003 “Spatiotemporal Protocols and Analyses for Wireless Sensor Networks,” NSF Information Technology Research (ITR) award. (CCR-0325529, Aug. 2003 - Aug. 2006, C. Lu (PI) and G.-C. Roman, \$500,000)
- 2002 “A Logical Framework for Adaptive System Interoperability,” ONR MURI research contract managed as a subcontract with University of Illinois. The overall effort involves five related projects led by J. Meseguer and G. Agha at Univ. of Illinois Urbana-Champaign, C. Gunter at Univ. of Pennsylvania, G.-C. Roman at Washington Univ., and N. Venkatasubramanian at UC Irvine). (N00014-02-1-0715, June 2002 – April 2007, \$900,000)
- 2001 Ford Motor Company research partnership. (\$150,000, 2001-2003)
- “Student Travel Support for the Software Engineering and Mobility Workshop,” NSF travel grant. The Workshop was organized in conjunction with *International Conference on Software Engineering (ICSE’01)*, Toronto, Canada, May 13-14, 2001. (CCR-0111878, \$9,750)
- 2000 Ford Motor Company research partnership. (\$25,000)
- 1999 “Rapid Development of Dependable Applications over Ad Hoc Networks,” NSF research grant. (CCR-9970939, July 1999 - June 2002, \$391,053)
- IBM Partnership Award. (July 1999 - June 2000, \$30,000)
- 1998 “Query-Based Visualization: Supporting the Monitoring of Large Distributed Systems,” Boeing Fellowship supporting D. Hart. (July 1998 - June 2000, approx. \$70,000)
- 1997 “Effective Visual Presentation of Computer Generated Information,” NSF instrumentation grant. (CDA-9616969, Feb. 1997 - Jan. 1998, G.-C. Roman (PI), P. M. Hubbard, E. T. Kraemer, and S. Suri, \$130,728)
- “Query-Based Visualization of Executing Distributed Computations,” NSF research grant. (CDA-9619831, Jul. 1997 - Jun. 2000, G.-C. Roman (PI) and E. T. Kraemer, \$262,000 basic funding; \$8,053 REU supplement)
- 1996 “Reasoning about Program Interactions in the Presence of Mobility,” NSF research grant. (CCR-9624815, Aug. 1996 - Jul. 1998, \$132,270)
- 1995 “Correctness per Construction,” Siemens AG, Munich, Germany. (Oct. 1995-Sept. 1996, \$23,000)
- 1994 “A Research Infrastructure for Fast Image and Visualization Distribution,” NSF grant to expand an ATM multimedia computer network to support interdisciplinary collaborative work. (CDA-9401159, Aug. 1994 - Jul. 1997, J. S. Turner (PI) and investigators M. A. Franklin, M. Miller, G. Parulkar, and G.-C. Roman, \$939,618)
- 1993 “Advanced Design Methods for Critical Components of Concurrent Systems,” NSF research grant. (CCR-9217751, Jul. 1993 - Dec. 1996, \$331,326)

- 1992 “Multimedia ATM Network for Computer and Communication Research,” NSF grant for the design and deployment of a multimedia computer network. (CDA-9214622, Sept. 1992 - Feb. 1996, J. S. Turner (PI) and co-principal investigators J. R. Cox, M. W. Dubetz, M. A. Franklin, and G.-C. Roman, \$250,000)
- 1991 “A Proof-based Declarative Approach to Visualizing Concurrent Computations,” NSF research grant. (CCR-9015677, Feb. 1991 - Jul. 1993, \$169,756)
 “Software Engineering,” unrestricted grant from Osaka Gas Co., Ltd. (\$20,000)
 “Visualization Support for Formal Methods,” NSF educational supplement. (CCR-9015677, Dec. 1991 - Jan. 1993, \$16,858)
- 1990 “Parallel Processing,” unrestricted grant from Texas Instruments. (\$5,000)
 “Visualization of Concurrent Computations,” DARPA/NASA Assistantship in Parallel Processing for K. C. Cox. (26947M, Jun. 1990 - May 1991, \$26,000)
 “Professional Video Production Support for a Visualization Laboratory,” equipment gift from Matsushita Electric Industrial Co., Ltd. (\$60,000)
- 1988 “Equipment in Support of Parallel Processing Research,” NSF grant for the purchase of a 64 node NCUBE-7 parallel computer. (CCR-8716462, Mar. 1988 - Aug. 1989, \$70,000 with M. A. Franklin (PI) and M. Miller)
- 1985 “Photo-interpretation Speed-up by Semi-automated Feature Detection,” DMA contract investigating the speed-up of photo interpretation by semi-automated feature detection. (DMA800-85-C-0010, Jan. 1985 - Sept. 1987, \$482,659 with W. E. Ball)
- 1983 “Long-Range Technological Impact on Computer-Aided Product Development at DMA,” DMA/RADC contract investigating the exploitation of current technology in the Geographic Data Processing area: technological trends, requirements specification/validation, system design methodologies, software development practices and facilities. (F30602-83-K-0065, Apr. 1983 - Jan. 1986, \$229,475)
- 1982 “Modern Programming Environment Assessment,” RADC/DMA contract focusing on issues related to the establishment of a DMA software development facility. (F30602-80-C-0284, Apr. 1982 - Sept. 1982, \$30,000)
- 1980 “Total System Design Methodology Assessment,” RADC/DMA contract concerned with (a) the nature of and strategies involved in the identification of the hardware/software mix that comprises a distributed system and (b) the establishment and evolution of system design facilities. (F30602-80-C-0284, Sept. 1980 - Apr. 1982, \$209,365)
- 1979 “Total System Development Framework,” RADC contract investigating the dynamics of hardware/software trade-offs in distributed systems design. (F30602-78-C-0148, May 1979 - Sept. 1979, \$15,000)
- 1977 “Software Engineering Workshop,” Monsanto Company contract for software systems design methodology development and training. (Oct. 1977 - May 1978, \$30,000)

Industrial Consulting

My career as a software engineering consultant has been a source of strength for our software engineering instructional program and a crusade for the introduction of modern software design methods into everyday industrial practice. I was given the opportunity to play a key and exciting role in upgrading the software development practices of major corporations.

- 2004-08 Emerson Electric, St. Louis, Missouri—software architecture for dependable systems.
- 2003 bioMérieux, St. Louis, Missouri—software development process evaluation.
- 2002 Corporate Express, St. Louis, Missouri—software engineering training.
- 1995-01 Emerson Electric, St. Louis, Missouri—design reviews, software engineering training, and software process improvement.

- 1994-95 In-Sink-Erator, a division of Emerson Electric, Racine, Wisconsin—object-oriented, dependable software design.
- 1987-90 Emerson Electric, St. Louis, Missouri—software engineering training program.
- 1985-86 General Dynamics, Fort Worth, Texas—SDI contract investigating high-payoff distributed system design tools.
- 1985 McDonnell Douglas Astronautics, St. Louis, Missouri—requirements and design specification methods for common Ada missile packages.
- 1984-86 General Dynamics, Fort Worth, Texas—DMA contract to establish a modern software development environment and the methodology required to use it effectively.
- 1983 Computer Services Corporation (CSK), Tokyo, Japan—Ada language and software engineering training.
- 1982-83 McDonnell Douglas Astronautics, St. Louis, Missouri—software engineering methodology support, development of Ada-based design language for embedded systems and instruction in the use of the language and associated methodology.
- 1982 General Dynamics, Fort Worth, Texas—Army contract for the development of an Ada-based system design methodology for real-time embedded systems.
- 1981 Defense Mapping Agency Aerospace Center, St. Louis, Missouri—software systems design methodology development and training.
- 1980 Defense and Space Systems Group of TRW, Redondo Beach, California—Air Force contract for the development of a hardware/software trade-offs methodology.

Invited Talks

Beijing University

Bell Research Laboratories

Emerson Electric

Ford Research

Fudan University

Fundamental Approaches to Software Engineering (FASE 2004)—keynote speaker

Hewlett-Packard Laboratories (Pisa, Italy)

International Conference on Principles of Software Engineering (PRISE 2004)—invited speaker

International Workshop on Abstract State Machines (ASM 2003)—keynote speaker

International Workshop on Advanced Software Engineering (IWASE 2006)—keynote speaker

International Workshop on Formal Methods for Parallel Programming (FMPPTA 2002)

International Workshop on Software Engineering for Large-scale Multi-agent Systems (SELMAS 2004)—keynote speaker

Massachusetts Institute of Technology

Osaka Gas Information Systems Co.

Politecnico di Milano

Siemens AG (Munich, Germany)

Software Productivity Consortium (*Distinguished Lecture Series*)

SRI International

Technical University of Berlin
 Telcordia (formerly Bellcore)
 U. S. Naval Postgraduate School
 University of California at Irvine
 University of Illinois at Chicago
 University of Karlsruhe
 University of Missouri at Rolla
 University of Pennsylvania
 University of Pisa

Publications

UNDER REVIEW

Bhattacharya, S., Lu, C., and Roman, G.-C., "Utility-based Multi-Application Deployment in Shared Wireless Sensor Networks."

Sen, R., Roman, G.-C., Gill, C., and Luner, J., "CiAN: Workflow Management for MANETs."

Chipara, O., Hackman, G., Lu, C., Roman, G.-C., and Smart, W., "Radio Mapping for Indoor Environments."

Chipara, O., Brooks, C., Bhattacharya, S., Lu, C., Chamberlain, R., Roman, G.-C., and Bailey, T. C., "Reliable Real-time Clinical Monitoring Using Sensor Network Technology."

Chipara, O., Lu, C., Stankovic, J., and Roman, G.-C., "Dynamic Conflict-free Transmission Scheduling for Sensor Network Queries."

Xing, G., Bhattacharya, S., Lu, C., Chipara, O., Fok, C.-L., and Roman, G.-C., "Design and Analysis of Just-in-Time Prefetching Protocols for MobiQuery."

Chipara, O., Lu, C., and Roman, G.-C., "Real-Time Query Scheduling for Wireless Sensor Networks,"

IN PRESS

Rajamani, V., Julien, C., Payton, J., and Roman, G.-C., "PAQ: Persistent Adaptive Query Middleware for Dynamic Environments," to appear in *Proceedings of the 10th International Middleware Conference, (Middleware 2009)*.

Thomas, L., Wilson, J., Roman, G.-C., and Gill, C., "Achieving Coordination Through Dynamic Construction of Open Workflows," to appear in *Proceedings of the 10th International Middleware Conference, (Middleware 2009)*.

Fok, C.-L., Roman, G.-C., and Lu, C., "Agilla: A Mobile Agent Middleware for Self-Adaptive Wireless Sensor Networks." (to appear in *ACM Transactions on Autonomous and Adaptive Systems*)

Julien, C., Payton, J., Roman, G.-C., and Rajamani, V., "Semantic Self-Assessment of Query Results in Dynamic Environments." (to appear in *ACM TOSEM*)

2009

Fok, C.-L., Roman, G.-C., and Lu, C., "Enhanced Coordination in Sensor Networks through Flexible Sensing Provisioning," *Proceedings of the 11th International Conference on Coordination Models and Languages (Coordination 2009)*, Lecture Notes in Computer Science 5521, Field, J., and Vasconcelos, V., (editors), Springer-Verlag, Lisbon, Portugal, June 2009, pp. 66-85.

Rajamani, V., Julien, C., Payton, J., and Roman, G.-C., "Inquiry and Introspection for Non-Deterministic Queries in Mobile Environments," *Fundamental Approaches to Software Engineering (FASE 2009)*, Lecture Notes in Computer Science 5503, Chechik, M., and Wirsing, M., (editors), Springer-Verlag, York, UK, March 2009, pp. 401-416.

2008

Sen, R., Roman, G.-C., Gill, C., and Frank, A., "CiAN: A Workflow Engine for MANETs," *Proceedings of the 10th International Conference on Coordination Models and Languages (Coordination 2008)*, Lecture Notes in Computer Science 5052, Lea, D. and Zavattaro, G. (editors), Springer Verlag, Oslo, Norway, June 2008, pp. 280-295.

Bhattacharya, S., Fok, C.-L., Lu, C., and Roman, G.-C., "MLDS: A Flexible Location Directory Service for Tiered Sensor Networks," Special Issue on Advanced Location-based Services, *Computer Communications* 31, January 2008, pp. 1160-1172.

Julien, C., Roman, G.-C., and Huang, Q., "SICC: Source-Initiated Context Construction in Mobile Ad Hoc Networks," *IEEE Transactions on Mobile Computing* 7, No. 4, April 2008, pp. 401-415.

2007

Chipara, O., Lu, C., and Roman, G.-C., "Real-time Query Scheduling for Wireless Sensor Networks," *Proceedings of the 28th IEEE Real-Time Systems Symposium (RTSS 2007)*, December 2007, Tucson, AZ, pp. 389-399.

Payton, J., Julien, C., and Roman, G.-C., "Automatic Consistency Assessment for Query Results in Dynamic Environments," *Proceedings of the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE 2007)*, September 2007, Dubrovnik, Croatia, pp. 245-254. (*Distinguished Paper Award*)

Hackmann, G., Gill, C., and Roman, G.-C., "Extending BPEL for Interoperable Pervasive Computing," *Proceedings of the 2007 International Conference on Pervasive Services (ICPN 2007)*, July 2007, Istanbul, Turkey, pp. 204-213.

Fok, C.-L., Roman, G.-C., and Lu, C., "Towards a Flexible Global Sensing Infrastructure," *Proceedings of the International Workshop on Wireless Sensor Network Architecture (WWSNA 2007)*, April 2007, Cambridge, MA, pp. 49-54.

Sun, F., Fok, C.-L., and Roman, G.-C., "Demo Abstract: sChat: A Group Communication Service Over Wireless Sensor Networks," *Proceedings of the International Conference on Information Processing in Sensor Networks (IPSN 2007)*, April 2007, Cambridge, MA, pp. 543-544.

Bhattacharya, S., Fok, C.-L., Lu, C., and Roman, G.-C., "Design and Implementation of a Flexible Location Directory Service for Tiered Sensor Networks," *Proceedings of the 3rd International Conference on Distributed Computing in Sensor Systems (DCOSS'07)*, Lecture Notes in Computer Science 4549, Aspens, J., Scheideler, C., Arora, A., and Madded, S., (editors), Springer Verlag, Santa Fe, NM, June 2007, pp. 158-173.

Roman, G.-C., Julien, C., and Payton, J., "Modeling Adaptive Behaviors in Context UNITY," *Theoretical Computer Science* 376, No. 3, 2007, pp. 185-204.

Sen, R., Handorean, R., Roman, G.-C., and Hackmann, G., "Knowledge-driven Interactions with Services across Ad Hoc Networks," *International Journal of Cooperative Information Systems* 16, No. 1, March 2007, pp. 123-153.

Sen, R., Hackmann, G., Haitjema, M., Roman, G.-C., and Gill, C., "Coordinating Workflow Allocation and Execution in Mobile Environments," *Proceedings of the 9th International Conference on Coordination Models and Languages (Coordination 2007)*, Lecture Notes in Computer Science 4467, Murphy, A. L., and Vitek, J. (editors), Springer Verlag, Paphos, Cyprus, June 2007, pp. 249-267.

Frey, D. and Roman, G.-C., "Context-Aware Publish Subscribe in Mobile ad Hoc Networks," *Proceedings of the 9th International Conference on Coordination Models and Languages (Coordination 2007)*, Lecture Notes in Computer Science 4467, Murphy, A. L., and Vitek, J., (editors), Springer Verlag, Paphos, Cyprus, June 2007, pp. 37-55.

2006

Murphy, A. L., Picco, G. P., and Roman, G.-C., "LIME: A Coordination Middleware Supporting Mobility of Hosts and Agents," *ACM Transactions on Software Engineering and Methodology* 15, No. 3, July 2006, pp. 279-328.

Bhattacharya, S., Fok, C.-L., Lu, C., and Roman, G.-C., "Demo Abstract: A Hierarchical Location Directory Service Across Sensor and IP Networks," in *Proceedings of the ACM Conference on Embedded Networked Sensor Systems (SenSys'06)*, Bolder, Colorado, USA, November 2006, pp. 365-366.

Fok, C.-L., Roman, G.-C., and Lu, C., "Software Support for Application Development in Wireless Sensor Network," In *The Handbook of Mobile Middleware*, A. Corradi and P. Bellavista (editors), Auerbach Publications, Sept. 2006, pages 1227-1253.

Picco, G. P., Migliavacca, M., Murphy, A. L., and Roman, G.-C., "Distributed Abstract Data Types," *Proceedings of the 8th International Symposium on Distributed Objects and Applications (DOA'06)*, Meersman, R., Tari, Z., et al (editors), Lecture Notes in Computer Science 4276, Springer-Verlag, Montpellier, France, October 2006, pp. 1594-1612.

Hackmann, G., Haitjema, M., Gill, C., and Roman, G.-C., "Sliver: A BPEL Workflow Process Execution Engine for Mobile Devices," *Proceedings of the 4th International Conference on Service Oriented Computing (ICSOC 2006)*, Dan, A., and Lamersdorf, W., (editors), Lecture Notes in Computer Science 4294, Springer, Chicago, USA, December 2006, pp. 503-508.

Massaguer, D., Fok, C.-L., Venkatasubramanian, N., Roman, G.-C., and Lu, C., "Exploring Sensor Networks using Mobile Agents," *Proceedings of the Fifth International Joint Conference on Autonomous Agents & Multi Agent Systems*, Stone, P., and Weiss, G., (editors), Hakodate, Japan, May 2006, pp. 323-325.

Handorean, R., Sen, R., Hackmann, G., and Roman, G.-C., "Supporting Predictable Service Provision in MANETs via Context Aware Session Management," *International Journal of Web Services Research* 3, No. 3, July-September 2006, pp. 1-26.

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