

George Edwards, PhD

Computer Scientist

323-545-3933

george@quandarypeak.com

Quandary Peak Research

205 S Broadway, Suite 300

Los Angeles, CA 90012

quandarypeak.com/george

Education

Ph.D. in Computer Science

University of Southern California | Aug 2010

M.S. in Computer Science

University of Southern California | May 2006

B.S. in Computer Science, Minor in Mathematics

Vanderbilt University | Aug 2003

Employment

President & Principal Computer Scientist

Quandary Peak Research | Los Angeles, CA | June 2012–Present

- Providing software analysis and expert witness testimony in software-related litigation, including patent and copyright infringement, theft of trade secrets, breach-of-contract, and other matters.
- Analyzing software intellectual property and patent portfolios for validity and infringement in the context of licensing and brokering negotiations, startup investments, and M&A.
- Investigating software failures to determine the root cause and help clients understand whether and how the failure could have been avoided.
- Applying advanced analytic techniques based on calibrated parametric models for valuation of software products and estimation of software development costs.
- Documenting the architecture of software systems to identify structural similarities and differences among competing products and services and deduce the origin of software designs and code.

Lecturer of Computer Science

Computer Science Department, University of Southern California | Jan 2012–May 2017

- Teaching a graduate-level software engineering course for M.S. and Ph.D. students and practicing software and aerospace engineers (CSCI 568).
- Previously taught an undergraduate-level course on programming fundamentals, algorithms, and data structures (CSCI 102).

Co-Founder and CEO

Blue Cell Software | Los Angeles, CA | Aug 2010–June 2012

- Led and managed the development of a next-generation modeling and analysis platform for complex software-intensive systems.

- Developed advanced model-based algorithms for reliability, efficiency, and risk analysis.
- Conceived and implemented the business development strategy and produced and presented investment proposals.

Post-Doctoral Researcher

Center for Systems and Software Engineering, University of Southern California | Feb 2011–Sept 2011

- Conducted research on enterprise integration mechanisms to support net-centric operations.
- Investigated methods, processes, and tools for decomposition and refinement of SoS capability needs into detailed requirements and integration architectures for an NSA-funded research project.
- Designed key components of PATFrame, a decision support system for planning test events of networks of unmanned and autonomous vehicles.
- Applied lessons learned from large-scale corporate mergers, including the HP-Compaq merger, to software and systems integration challenges faced by the DoD and NSA.

Graduate Fellow

Computer Science Department, University of Southern California | Aug 2004–Aug 2010

- Designed and implemented XTEAM – a model-driven software design, analysis, and code generation toolset. XTEAM allows software architects to create domain-specific software architecture models, evaluate those models with respect to quality metrics, and automatically synthesize custom code. XTEAM has been utilized by more than a dozen software engineering projects in academia and industry.
- Built key components of Prism-MW, a novel Java-based implementation platform for mobile and handheld devices that enables rapid development of event-based applications.
- Invented the adaptive layered style, an architectural style for autonomous systems, and designed the corresponding implementation support in Prism-MW.
- Developed iterative redundancy, an algorithm for reliably distributing and replicating computation on untrusted networks of faulty and malicious nodes.
- Contributed as an architect and developer to a diverse set of experimental software systems, such as computer simulations of volunteer computing networks and collaboration tools for geographically distributed teams of engineers.

Research Associate

Intelligent Systems Technology, Inc. | Los Angeles, CA | May 2009–Jan 2010

- Designed and implemented an instructional game for US Army vehicle maintenance technicians that teaches techniques for making decisions in the presence of uncertainty.
- Developed research grant proposals for DoD and DHS funding through the Small Business Innovation Research (SBIR) program and Broad Agency Announcements (BAAs).
- Briefed managers of research funding programs at DoD and DHS on critical research challenges and opportunities in computer science and software engineering.

Graduate Research Intern

T.J. Watson Research Center, IBM | Yorktown Heights, NY | May 2008–Aug 2008

- Developed elements of BlueStar, a scalable mobile device management and provisioning system. BlueStar allows system administrators to easily manage the configuration of thousands of mobile devices.

- Co-designed Proxima, a context-aware search service for mobile devices. Proxima provides image based search capabilities for finding people in a large database by leveraging contextual information associated with an image, such as location, time, and the unique characteristics of the user.
- Developed requirements for a mobile application for insurance adjusters and managed a team of overseas programmers.

Software Engineer

The Boeing Company | Huntington Beach, CA | June 2005–Aug 2006

- Advised, coordinated, and assisted C4ISR software architecture modeling and analysis efforts leveraging state-of-the-art model-driven engineering technologies.
- Developed the architecture for a mobile (handheld) device for controlling unmanned autonomous air and ground robots.
- Integrated multiple independent simulations of interactions among military vehicles and networks to create test harnesses for subcontractor-supplied software components.
- Created and evaluated software architecture descriptions, guidance memoranda, requirements specifications, design models, trade studies, risk analyses, and development schedules.

Graduate Research Assistant

Computer Science Department, Vanderbilt University | Nashville, TN | Sept 2003–May 2004

- Developed a CORBA Component Model framework that supports application access to highly optimized and scalable event-based (publish-subscribe) communication services.
- Created a specification language and supporting toolset for configuring QoS policies in component based DRE systems.
- Designed regression tests and enhanced support for key capabilities in a real-time CORBA implementation.

Network Technician

CTC Networks | Nashville, TN | Oct 2002–Mar 2003

- Administered Windows-based small business networks and performed network and PC upgrades, troubleshooting, and repair.
- Advised business clients on software purchasing and technology infrastructure investment decisions.

e-Business Consultant

Nebraska e-Commerce Association | Lincoln, NE | May 2001–Aug 2001

- Advised small businesses on e-commerce development and implementation strategies.

Web Developer

Nebraska Educational Telecommunications | Lincoln, NE | May 1998–Aug 2000

- Developed front-end HTML and JavaScript and secure grade assessment software for CLASS, the first web-delivered, fully accredited high school.
- Implemented a multimedia publishing system for web-based distribution of television programs.

Litigation Consulting

- ***Inter Partes* Review of U.S. Patent No. 8,737,933 and Patent No. 9,173,054** | Mar 2024–Present
Jurisdiction: U.S. Patent and Trademark Office (USPTO)
Case Number: IPR2024-00305
Counsel: McKool Smith, Alston & Bird LLP
Nature of Suit: Patent
- **InQuisient Inc v. ServiceNow, Inc** | Mar 2024–Present
Jurisdiction: US District Court for the District of Delaware
Case Number: 1:22-cv-00900
Counsel: Fish & Richardson P.C.
Nature of Suit: Patent
- **Electronic Devices Including Smartphones, Computers, Tablet Computers, and Components Thereof**
Dec 2023–Present
Jurisdiction: International Trade Commission (ITC)
Case Number: 337-TA-1373
Counsel: Alston & Bird LLP
Nature of Suit: Patent
- **Security First Innovations, LLC vs Google LLC** | Dec 2023–Present
Jurisdiction: US District Court Eastern District of Virginia Alexandria Division
Case Number: 2-23-cv-00097-EWH-RJK
Counsel: Sullivan & Cromwell LLP
Nature of Suit: Patent
- **Smart Mobile Technologies, LLC v. Samsung Electronics Co. Ltd.** | Oct 2023–Present
Jurisdiction: Western District of Texas
Case Number: 6:21-cv-00701
Counsel: Graves & Shaw LLP
Nature of Suit: Patent
- **AGI Suretrack, LLC v. Farmers Edge Inc** | Sept 2023–Present
Jurisdiction: U.S. District Court for the District of Nebraska
Case Number: 8:22-cv-00275-JFB-SMB
Counsel: Irell & Manella LLP
Nature of Suit: Patent
- **Club Speed, LLC v. K1 Speed, Inc.** | July 2023–Present
Jurisdiction: Superior Court of California
Case Number: 30-2022-01241507-CU-BC-CJC
Counsel: Rutan & Tucker, LLP
Nature of Suit: Breach of Contract
- **University of Victoria v. FreshWorks Studio Inc** | July 2023–Present
Jurisdiction: BC Supreme Court
Case Number: S-226081
Counsel: Smart & Biggar LLP
Nature of Suit: Patent

- **Entangled Media, LLC v. Dropbox, Inc.** | May 2023–Present
 Jurisdiction: Western District of Texas
 Case Number: 1:22-cv-01324
 Counsel: Skiermont Derby
 Nature of Suit: Patent
- **Multimodal Media LLC v. ZTE Corporation** | Mar 2023–Oct 2023
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 2:21-cv-00437
 Counsel: McDermott Will & Emery
 Nature of Suit: Patent
- **Cutting Edge Vision, LLC v. TCL Technology Group Corporation, et al.** | Mar 2023–Aug 2023
 Jurisdiction: U.S. District Court for the Western District of Texas
 Case Number: 6:22-cv-00285
 Counsel: Law Offices of Lisa and Lesko
 Nature of Suit: Patent
- **Espíritu Santo Holdings, LP & L1bre Holding, LLC v. United Mexican States** | Dec 2022–Present
 Jurisdiction: ICSID
 Case Number: ARB/20/13 - 20417 (filed September 17, 2021)
 Counsel: Pillsbury Winthrop Shaw Pittman LLP
 Nature of Suit: International Investment Arbitration
 Technology: Mobile phone applications, ride hailing services
- **LQK Corporation v. Overall Parts Solutions** | Nov 2022–Present
 Jurisdiction: Court of Chancery of the State of Delaware
 Case Number: 2022-0036
 Counsel: Jones Day
 Nature of Suit: Breach of Contract
- **IPA Technologies, Inc. v. Microsoft Corp.** | Oct 2022–May 2024
 Jurisdiction: U.S. District Court for the District of Delaware
 Case Number: 1:18-cv-00001
 Counsel: Skiermont Derby LLP
 Nature of Suit: Patent
- **Multimodal Media LLC v. Guangdong OPPO Mobile Telecomm. Corp., Ltd.** | Sept 2022–Sept 2023
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 2:21-cv-00436
 Counsel: Moore IP Law
 Nature of Suit: Patent
- **Ark Innovation Technology Inc., et al. v. Matidor Technologies Inc. et al.** | May 2022–Present
 Jurisdiction: Federal Court of Canada
 Case Number: 1163929
 Counsel: Gowling WLG
 Nature of Suit: Copyright
- **Farmobile, LLC v. Farmers Edge, Inc.** | May 2022–Sept 2023
 Jurisdiction: U.S. District Court for the District of Nebraska
 Case Number: 8:22-cv-00275
 Counsel: Irell & Manella LLP
 Nature of Suit: Patent

- **Artec Europe S.a.r.l. v. Schenzen Creality 3D Technology Co., Ltd., et al.** | Apr 2022–Present
 Jurisdiction: U.S. District Court for the Eastern District of New York
 Case Number: 1:22-cv-01676
 Counsel: Munck Wilson Mandala LLP
 Nature of Suit: Patent
- **Autoscan GmbH et al v. 5121175 Manitoba LTD d/b/a DCC Hail** | Nov 2020–Sept 2021
 Jurisdiction: Federal Court of Canada
 Case Number: T-359-20
 Counsel: Gowling WLG
 Nature of Suit: Copyright
- **Intellicad Technology Consortium v. Suzhou Gstarsoft Co. Ltd.** | July 2020–Oct 2020
 Jurisdiction: U.S. District Court for the District of Oregon
 Case Number: 3:19-cv-01963
 Counsel: Perkins Coie LLP
 Nature of Suit: Copyright
- **Denika Terry, et al. v. Wasatch Advantage Group, LLC et al.** | June 2020–July 2020
 Jurisdiction: Superior Court of California, County of Los Angeles
 Case Number: 34-2014-00158417
 Counsel: Goldstein, Borgen, Dardarian & Ho
 Nature of Suit: Class Action
- **American National Manufacturing, Inc. v. Sleep Number Corporation** | Sept 2019–July 2020
 Jurisdiction: United States Patent and Trademark Office
 Case Number: IPR2019-00497, IPR2019-00500, IPR2019-00514
 Counsel: Fox Rothschild LLP
 Nature of Suit: Patent
- **Bookman v. Resorts World Casino New York City, Genting New York LL and International Game Technology PLC** | Sept 2019–Oct 2019
 Jurisdiction: Supreme Court of the State of New York, Queens County
 Case Number: 0713839/2017
 Counsel: Proskauer Rose LLP
 Nature of Suit: Negligence and Breach of Contract
- **IPA Technologies, Inc. v. Google LLC** | May 2019–Present
 Jurisdiction: U.S. District Court for the District of Delaware
 Case Number: 18-cv-00318
 Counsel: Skiermont Derby LLP
 Nature of Suit: Patent
- **IPA Technologies, Inc. v. Amazon.com, Inc. et al.** | May 2019–Apr 2022
 Jurisdiction: U.S. District Court for the District of Delaware
 Case Number: 18-cv-00318
 Counsel: Skiermont Derby LLP
 Nature of Suit: Patent
- **Sequoia Technology LLC v. Dell, Inc., Dell Technologies Inc., Hewlett Packard Enterprise Co., Hitachi Ltd, and Super Micro Computer** | Oct 2018–Jan 2023
 Jurisdiction: U.S. District Court for the District of Delaware
 Case Number: 1:18-cv-01127
 Counsel: One LLP
 Nature of Suit: Patent

- **Lithography Machines and Systems, and Components Thereof** | Sept 2018–Apr 2019
 Jurisdiction: U.S. International Trade Commission
 Case Number: 337-TA-1128, 337-TA-1129
 Counsel: Morrison & Foerster LLP (Nikon Corporation)
 Nature of Suit: Patent
- **Sleep Number Corporation v. Sizewise Rentals, LLC and American National Manufacturing, Inc.** | Aug 2018–Dec 2020
 Jurisdiction: U.S. District Court for the Central District of California
 Case Number: 5:18-cv-00356
 Counsel: Fox Rothschild LLP
 Nature of Suit: Patent
- **Capstone Logistics Holdings, Inc., et al. v. Humano, LLC, et al.** | June 2018–Jan 2019
 Jurisdiction: U.S. District Court for the Southern District of New York
 Case Number: 1:17-cv-04819
 Counsel: Ferber Law
 Nature of Suit: Copyright and Trade Secret
- **Arlynn Whittaker v. Glaser Weil Fink Howard Avchen & Shapiro, LLP** | Mar 2018–Oct 2018
 Jurisdiction: Superior Court of California, County of Los Angeles
 Case Number: BC657065, BC664506
 Counsel: Baker Marquart
 Nature of Suit: Professional Negligence
- **CyWee Group Ltd. v. ZTE Corporation, ZTE (USA), Inc., and ZTE (TX), Inc.** | Feb 2018–Jan 2019
 Jurisdiction: U.S. District Court for the Southern District of California
 Case Number: 3:17-cv-02130
 Counsel: Pillsbury Winthrop Shaw Pittman LLP
 Nature of Suit: Patent
- **SEVEN Networks, LLC v. ZTE (USA) Inc. and ZTE Corporation** | Jan 2018–Aug 2019
 Jurisdiction: U.S. District Court for the Northern District of Texas
 Case Number: 3:17-cv-01495
 Counsel: Pillsbury Winthrop Shaw Pittman LLP
 Nature of Suit: Patent
- **Farmobile, LLC v. Farmers Edge Inc.** | Nov 2017–Present
 Jurisdiction: Federal Court of Canada
 Case Number: FC 915, FC 688, FC 915, FC 1269
 Counsel: Gowling WLG
 Nature of Suit: Patent
- **Space Data Corporation v. Alphabet Inc., Google LLC, and Loon, LLC** | July 2017–Sept 2019
 Jurisdiction: U.S. District Court for the Northern District of California
 Case Number: 5:16-cv-03260
 Counsel: Hosie Rice LLP
 Nature of Suit: Patent and Trade Secret
- **Hitachi Maxell, Ltd. v. ZTE Corp. and ZTE USA Inc.** | July 2017–June 2018
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 16-cv-00179
 Counsel: Pillsbury Winthrop Shaw Pittman LLP
 Nature of Suit: Patent

- **Semcon IP Inc. v. ZTE Corporation, et al.** | May 2017–Mar 2018
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 16-cv-00437
 Counsel: Pillsbury Winthrop Shaw Pittman LLP
 Nature of Suit: Patent
- **Vesta Corporation v. Amdocs Management Limited and Amdocs, Inc.** | Mar 2017–Nov 2018
 Jurisdiction: U.S. District Court for the District of Oregon
 Case Number: 3:14-cv-01142
 Counsel: Perkins Coie LLP
 Nature of Suit: Trade Secret
- **eBay, Inc. v. Masterobjects, Inc.** | Mar 2017–July 2018
 Jurisdiction: United States Patent and Trademark Office
 Case Number: IPR2017-00740
 Counsel: Carr & Ferrell LLP
 Nature of Suit: Patent
- **Implicit, LLC v. Trend Micro, Inc.** | Jan 2017–Oct 2017
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 6:16-cv-00080, 6:17-cv-00183
 Counsel: DiNovo Price Ellwanger LLP
 Nature of Suit: Patent
- **Implicit, LLC v. Ericsson, Inc.** | Jan 2017–Mar 2017
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 6:16-cv-00075, 6:17-cv-00181
 Counsel: DiNovo Price Ellwanger LLP
 Nature of Suit: Patent
- **Sound View Innovations, LLC v. Facebook, Inc.** | Aug 2016–Jan 2018
 Jurisdiction: U.S. District Court for the District of Delaware
 Case Number: 1:16-cv-00116
 Counsel: Desmarais LLP
 Nature of Suit: Patent
- **Farmers Edge, Inc., et al. v. Farmobile LLC, et al.** | July 2016–May 2018
 Jurisdiction: U.S. District Court for the District of Nebraska
 Case Number: 8:17-cv-00225
 Counsel: Husch Blackwell LLP
 Nature of Suit: Trade Secret and Breach of Contract
- **Certain Air Mattress Systems, Components Thereof, and Methods of Using the Same** | Apr 2016–May 2016
 Jurisdiction: U.S. International Trade Commission
 Case Number: 337-TA-971
 Counsel: Pillsbury Winthrop Shaw Pittman LLP (Sleep Number Corporation)
 Nature of Suit: Patent
- **Synca Direct Inc. v. Scil Animal Care Company and Vet Novations, Inc.** | Mar 2016–Dec 2016
 Jurisdiction: U.S. District Court for the Northern District of New York
 Case Number: 8:15-cv-00794
 Counsel: White and Williams LLP
 Nature of Suit: Breach of Contract

- **TiVo, Inc. v. Samsung Electronics Co., Ltd., et al.** | Mar 2016–Nov 2016
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 2:15-cv-01503
 Counsel: Irell & Manella LLP
 Nature of Suit: Patent
- **Backflip Software, Inc. v. Cisco Systems, Inc.** | Feb 2016–Oct 2016
 Jurisdiction: Superior Court of California, County of Santa Clara
 Case Number: 2013-1-cv-242234
 Counsel: Hosie Rice LLP
 Nature of Suit: Breach of Contract
- **Cellular Communications Equipment, LLC v. HTC Corporation and ZTE Corp.** | Dec 2015–Aug 2018
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 2:15-cv-00576
 Counsel: Pillsbury Winthrop Shaw Pittman LLP
 Nature of Suit: Patent
- **Ericsson Inc., et al. v. TCL Communication Technology Holdings, Ltd., et al.** | Sept 2015–Dec 2015
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 2:15-cv-00011
 Counsel: Sheppard Mullin Richter & Hampton LLP
 Nature of Suit: Patent
- **Chipp'd Ltd. v. Crush & Lovely LLC** | July 2015–Sept 2015
 Jurisdiction: American Arbitration Association
 Counsel: White and Williams LLP
 Nature of Suit: Breach of Contract
- **Bryndon Fisher v. The United States of America** | Aug 2015–July 2023
 Jurisdiction: United States Court of Federal Claims
 Case Number: 13-608C
 Counsel: Schubert Jonckheer & Kolbe LLP
 Nature of Suit: Class Action
- **Seymore Levine v. The Boeing Company** | July 2015–Jan 2016
 Jurisdiction: U.S. District Court for the Central District of California
 Case Number: 2:14-cv-06859
 Counsel: Quinn Emanuel Urquhart & Sullivan LLP
 Nature of Suit: Patent
- **Global Cash Access, Inc. v. NRT Technology Corp. et al.** | July 2015–Mar 2016
 Jurisdiction: U.S. District Court for the District of Nevada
 Case Number: 2:15-cv-00822
 Counsel: Pillsbury Winthrop Shaw Pittman LLP
 Nature of Suit: Patent
- **Anthony Johnson v. Storix, Inc.** | June 2015–Dec 2015
 Jurisdiction: U.S. District Court for the Southern District of California
 Case Number: 3:14-cv-01873
 Counsel: Eastman & McCartney LLP
 Nature of Suit: Copyright

- **Custom Media Technologies LLC v. AT&T Services, Inc., et al.** | Apr 2015–June 2015
 Jurisdiction: U.S. District Court for the District of Delaware
 Case Number: 1:13-cv-01419
 Counsel: Freitas Angell & Weinberg LLP
 Nature of Suit: Patent
- **Huricks et al. v. Shopkick, Inc.** | Apr 2015–Aug 2015
 Jurisdiction: U.S. District Court for the Northern District of California
 Case Number: 4:14-cv-02464
 Counsel: Newman DuWors, LLP
 Nature of Suit: Telephone Consumer Protection Act (TCPA)
- **Fox Television Stations, Inc. v. FilmOn X, LLC, et al.** | Mar 2015–July 2015
 Jurisdiction: U.S. District Court for the District of Columbia
 Case Number: 1:13-cv-00758
 Counsel: Baker Marquart LLP
 Nature of Suit: Copyright
- **e-Watch, Inc. et al. v. ZTE Solutions, Inc., ZTE (USA) Inc. and ZTE Corp.** | Mar 2015–Jan 2017
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 2:13-cv-01071
 Counsel: Pillsbury Winthrop Shaw Pittman LLP
 Nature of Suit: Patent
- **Novatel Wireless, Inc., et al. v. ZTE Corp. and ZTE (USA) Inc.** | Jan 2015–July 2015
 Jurisdiction: U.S. District Court for the Southern District of California
 Case Number: 3:12-cv-02576
 Counsel: Pillsbury Winthrop Shaw Pittman LLP
 Nature of Suit: Patent
- **Essociate, Inc. v. Clickbooth.com, LLC** | Oct 2014–Feb 2015
 Jurisdiction: U.S. District Court for the Central District of California
 Case Number: 8:13-cv-01886
 Counsel: Newman DuWors, LLP
 Nature of Suit: Patent
- **Adaptix, Inc. v. ZTE Corporation, ZTE Solutions, Inc., and ZTE (USA) Inc.** | Sept 2014–July 2016
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 6:13-cv-00438
 Counsel: Pillsbury Winthrop Shaw Pittman LLP
 Nature of Suit: Patent
- **VStream Technologies, LLC v. ZTE Corporation and ZTE (USA) Inc., et al.** | Sept 2014–July 2015
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 6:14-cv-00296
 Counsel: Pillsbury Winthrop Shaw Pittman LLP
 Nature of Suit: Patent
- **State of California v. Burlena King** | Aug 2014–Sept 2014
 Jurisdiction: Superior Court of California, County of Los Angeles
 Counsel: Law Offices of the Los Angeles County Public Defender
 Nature of Suit: Criminal

- **Hill-Rom Company, Inc., et al. v. General Electric Company** | July 2014–Sept 2014
 Jurisdiction: U.S. District Court for the Eastern District of Virginia
 Case Number: 2:14-cv-00187
 Counsel: Schiff Hardin LLP
 Nature of Suit: Patent
- **Personal Audio LLC v. ZTE Corporation, et al.** | July 2014–May 2015
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 1:14-cv-00008
 Counsel: Pillsbury Winthrop Shaw Pittman LLP
 Nature of Suit: Patent
- **Yardi Systems, Inc. v. Property Solutions International, Inc.** | May 2014–Sept 2019
 Jurisdiction: U.S. District Court for the Central District of California
 Case Number: 2:13-cv-07764
 Counsel: Morrison & Foerster, LLP
 Nature of Suit: Copyright and Trade Secret
- **AgJunction, LLC v. Agrian, Inc. et al.** | Apr 2014–Feb 2015
 Jurisdiction: U.S. District Court for the District of Kansas
 Case Number: 2:14-cv-02069
 Counsel: Husch Blackwell LLP
 Nature of Suit: Copyright and Trade Secret
- **Davies v. L.A. Checker Cab** | Apr 2014–June 2014
 Jurisdiction: Superior Court of California, County of Los Angeles
 Case Number: SC111290
 Counsel: Cheong, Denove, Rowell & Bennett
 Nature of Suit: Negligence
- **Inter Partes Review of U.S. Patent No. 8,466,795** | Feb 2014–July 2014
 Jurisdiction: U.S. Patent and Trademark Office
 Case Number: IPR2014-00670
 Counsel: Pillsbury Winthrop Shaw Pittman LLP (ZTE Corporation)
 Nature of Suit: Patent
- **Certain Wireless Devices, Including Mobile Phones And Tablets II** | Feb 2014–July 2014
 Jurisdiction: U.S. International Trade Commission
 Case Number: 337-TA-905
 Counsel: Pillsbury Winthrop Shaw Pittman LLP (ZTE Corporation)
 Nature of Suit: Patent
- **Pragmatus Mobile, LLC v. ZTE Corporation** | Feb 2014–July 2014
 Jurisdiction: U.S. District Court for the District of Delaware
 Case Number: 1:14-cv-00443
 Counsel: Pillsbury Winthrop Shaw Pittman LLP
 Nature of Suit: Patent

- **Intellectual Ventures, LLC v. AT&T Mobility, LLC, et al.**
Intellectual Ventures, LLC v. T-Mobile USA, Inc., et al.
Intellectual Ventures, LLC v. Nextel Operations, Inc., et al.
Intellectual Ventures, LLC v. United States Cellular Corporation | Oct 2013–May 2015
 Jurisdiction: U.S. District Court for the District of Delaware
 Case Number: 1:12-cv-00193, 1:13-cv-01631, 1:13-cv-01636, 1:13-cv-01637,
 1:13-cv-01634, 1:13-cv-01635, 1:13-cv-01632, 1:13-cv-01633
 Counsel: Dechert LLP
 Nature of Suit: Patent
- **Front Row Technologies, LLC v. NBA Media Ventures, LLC, et al.** | Oct 2013–July 2016
 Jurisdiction: U.S. District Court for the District of New Mexico
 Case Number: 1:13-cv-01153
 Counsel: Shore Chan DePumpo LLP
 Nature of Suit: Patent
- **Nokia Corporation and Nokia Inc. v. HTC Corporation and HTC America, Inc.** | Dec 2013–Feb 2014
 Jurisdiction: U.S. District Court for the District of Delaware
 Case Number: 1:12-cv-00549, 1:12-cv-00550, 1:12-cv-00551
 Counsel: Desmarais LLP
 Nature of Suit: Patent
- **Certain Portable Electronic Communications Devices, Including Mobile Phones and Components Thereof** | Aug 2013–Feb 2014
 Jurisdiction: U.S. International Trade Commission
 Case Number: 337-TA-885
 Counsel: Desmarais LLP (Nokia Corp.)
 Nature of Suit: Patent
- **SecurityBase.com v. Jeffrey Essick, et al.** | Aug 2013–June 2015
 Jurisdiction: Superior Court of California, County of Orange
 Case Number: 30-2012-00546106
 Counsel: Younesi & Yoss, LLP
 Nature of Suit: Copyright and Trade Secret
- **Nokia Corp. and Intellisync Corp. v. HTC America, Inc., and Exedea, Inc.** | Feb 2013–May 2013
 Jurisdiction: U.S. District Court for the District of Delaware
 Case Number: 1:12-cv-00549, 1:12-cv-00550
 Counsel: Desmarais LLP
 Nature of Suit: Patent
- **Certain Electronic Devices, Including Mobile Phones and Tablet Computers, and Components Thereof** | Feb 2013–May 2013
 Jurisdiction: U.S. International Trade Commission
 Case Number: 337-TA-847
 Counsel: Desmarais LLP (Nokia Corp.)
 Nature of Suit: Patent
- **Essociate, Inc. v. Azoogole.com, Inc. and Epic Media Group, Inc.** | Nov 2012–Oct 2013
 Jurisdiction: U.S. District Court for the Western District of Wisconsin
 Case Number: 3:11-cv-00727
 Counsel: Newman DuWors, LLP
 Nature of Suit: Patent

- **John Doe v. Passageway School** | Oct 2012–Dec 2012
 Jurisdiction: Superior Court of California, County of Ventura
 Case Number: 2012-00418623
 Counsel: Stone & Hiles, LLP
 Nature of Suit: Negligence
- **Essociate, Inc. v. Neverblue Media, Inc.** | Sept 2012–July 2013
 Jurisdiction: U.S. District Court for the Central District of California
 Case Number: 2:12-cv-08455
 Counsel: Newman DuWors, LLP
 Nature of Suit: Patent
- **Porto Technology Co., Ltd. v. Cellco Partnership d/b/a Verizon Wireless** | Sept 2012–Feb 2014
 Jurisdiction: U.S. District Court for the Eastern District of Virginia
 Case Number: 3:12-cv-00678, 3:13-cv-00265
 Counsel: Fox Rothschild LLP
 Nature of Suit: Patent
- **Flashpoint Technology, Inc. v. ZTE Corporation** | Aug 2012–Mar 2013
 Jurisdiction: U.S. District Court for the District of Delaware
 Case Number: 12-cv-00649
 Counsel: Goodwin Procter LLP
 Nature of Suit: Patent
- **Certain Electronic Imaging Devices** | Aug 2012–Mar 2013
 Jurisdiction: U.S. International Trade Commission
 Case Number: 337-TA-850 (ZTE Corporation)
 Counsel: Goodwin Procter LLP
 Nature of Suit: Patent
- **MobileMedia Ideas, LLC v. HTC Corporation and HTC America, Inc.** | July 2012–May 2013
 Jurisdiction: U.S. District Court for the Eastern District of Texas
 Case Number: 2:10-cv-00112
 Counsel: Desmarais LLP
 Nature of Suit: Patent
- **Golden Archer Investments, LLC v. SkyNet Financial Systems, LLC** | July 2012–Dec 2012
 Jurisdiction: U.S. District Court for the Southern District of New York
 Case Number: 1:11-cv-03673
 Counsel: Goldman Ismail Tomaselli Brennan & Baum LLP
 Nature of Suit: Breach of Contract
- **Inter Partes Reexamination of U.S. Patent No. 7,702,669** | May 2012–July 2012
 Jurisdiction: U.S. Patent and Trademark Office
 Case Number: 95/001,844
 Counsel: Hickman Palermo Truong Becker Bingham Wong LLP (RingCentral, Inc.)
 Nature of Suit: Patent
- **Denise Black v. Prowess, Inc.** | Mar 2012–May 2012
 Jurisdiction: State of New York, Supreme Court, County of Ontario
 Case Number: 0102070/2009
 Counsel: Smith, Sovik, Kendrick & Sugnet, PC
 Nature of Suit: Breach of Contract

- **Essociate, Inc. v. Direct ROI, LLC** | Mar 2012–June 2012
Jurisdiction: U.S. District Court for the Central District of California
Case Number: 2:10-cv-02107, 8:12-cv-00444
Counsel: Newman DuWors, LLP
Nature of Suit: Patent
- **EchoStar Technologies, Corp. v. TiVo Inc. and Humax USA, Inc.** | Mar 2011–Apr 2011
Jurisdiction: U.S. District Court for the Eastern District of Texas
Case Number: 5:05-cv-00081
Counsel: Morrison & Foerster, LLP
Nature of Suit: Patent

Journal and Magazine Articles

- Mahdi Eslamimehr, George Edwards, and Mohsen Lesani | 2017
Efficient Detection and Validation of Atomicity Violations in Concurrent Programs – Journal of Systems & Software
- Yuriy Brun, Jae young Bang, George Edwards, and Nenad Medvidovic | 2015
Self-Adapting Reliability in Distributed Software Systems – IEEE Transactions on Software Engineering
- Chris A. Mattmann, Nenad Medvidovic, Sam Malek, George Edwards and Somo Banerjee | 2012
A Middleware Platform for Providing Mobile and Embedded Computing Instruction to Software Engineering Students – IEEE Transactions on Education
- Nenad Medvidovic, Hossein Tajalli, Joshua Garcia, Yuriy Brun, Ivo Krka, and George Edwards | 2011
Engineering Heterogeneous Robotics Systems: A Software Architecture-Based Approach – IEEE Computer
- Nenad Medvidovic and George Edwards | 2010
Software Architecture and Mobility: A Roadmap – Journal of Systems and Software (JSS): Special Issue on Software Architecture and Mobility
- Nenad Medvidovic, Hossein Tajalli, Joshua Garcia, Yuriy Brun, Ivo Krka, George Edwards, Marija Mikic Rakic, Sam Malek, and Gaurav Sukhatme | 2010
An Architecture-Driven Software Mobility Framework – Journal of Systems and Software (JSS): Special Issue on Software Architecture and Mobility
- George Edwards, Chiyong Seo, and Nenad Medvidovic | 2008
Model Interpreter Frameworks: A Foundation for the Analysis of Domain-Specific Software Architectures – Journal of Universal Computer Science (JUICS): Special Issue on Software Components, Architectures and Reuse
- Aniruddha Gokhale, Krishnakumar Balasubramanian, Jaiganesh Balasubramanian, Arvind Krishna, George T. Edwards, Gan Deng, Emre Turkay, Jeffrey Parsons, and Douglas C. Schmidt | 2005
Model-Driven Middleware: A New Paradigm for Deploying and Provisioning Distributed Real-time and Embedded Applications – Elsevier Journal of the Science of Computer Programming: Special Issue on Model Driven Architecture

Conference Papers

- Mahdi Eslamimehr, George Edwards | December 2015
End-to-End Cross-Language Test Case Generation for Web Applications
Proceedings of the 9th EAI International Conference on Performance Evaluation Methodologies and Tools
- Christoph Dorn, George Edwards, Nenad Medvidovic | September 2012
Analyzing Design Tradeoffs in Large-scale Socio-Technical Systems through Simulation of Dynamic Collaboration Patterns
Proceedings of the 20th International Conference on Cooperative Information Systems (CoopIS)
- George Edwards, Nenad Medvidovic, Yuriy Brun | August 2012
Automated Analysis and Code Generation for Domain-Specific Models
Proceedings of the Joint 10th Working IEEE/IFIP Conference on Software Architecture & 6th European Conference on Software Architecture (WICSA/ECSA)
- George Edwards, Yuriy Brun, Nenad Medvidovic | November 2011
Isomorphism in Model Tools and Editors
Proceedings of the 26th IEEE/ACM International Conference on Automated Software Engineering (ASE)
- Yuriy Brun, George Edwards, Jae Young Bang, Nenad Medvidovic | June 2011
Smart Redundancy for Distributed Computation
Proceedings of 31st International Conference on Distributed Computing Systems (ICDCS)
- Hossein Tajalli, Joshua Garcia, George Edwards, Nenad Medvidovic | September 2010
PLASMA: A Plan-based Layered Architecture for Software Model-driven Adaptation
Proceedings of the 25th IEEE/ACM International Conference on Automated Software Engineering (ASE)
- Jae Young Bang, Daniel Popescu, George Edwards, Nenad Medvidovic, Naveen Kulkarni, Girish M. Rama, Srinivas Padmanabhuni | May 2010
CoDesign - A Highly Extensible Collaborative Software Modeling Framework
Research Demonstrations Track, Proceedings of the ACM/IEEE 32nd International Conference on Software Engineering (ICSE)
- Ivo Krka, George Edwards, Yuriy Brun, Nenad Medvidovic | August 2009
Synthesizing Partial Component-Level Behavior Models from System Specifications
Proceedings of the 7th Joint Meeting of the European Software Engineering Conference and ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE)
- Joshua Garcia, Daniel Popescu, George Edwards, and Nenad Medvidovic | June 2009
Toward a Catalogue of Architectural Bad Smells
Proceedings of the 5th International Conference on the Quality of Software Architectures (QoSA)
- Ivo Krka, George Edwards, Yuriy Brun, and Nenad Medvidovic | May 2009
From System Specifications to Component Behavioral Models
New Ideas and Emerging Results Track, Companion Volume of the 31st International Conference on Software Engineering (ICSE)
- Joshua Garcia, Daniel Popescu, George Edwards, and Nenad Medvidovic | March 2009
Identifying Architectural Bad Smells
Proceedings of the 13th European Conference on Software Maintenance and Reengineering (CSMR)

- Steve Mastrianni, David Bantz, Terrence Buechner, Tom Chefalas, George Edwards, Song Jinho, Dong Jun Lan, Gary Leonardi, Leslie Liu, Randy Moulic, Dennis G. Shea, Andrew Wyskida | October 2008
BlueStar: Managed Services for Enterprise Mobility
Proceedings of the IEEE International Conference on e-Business Engineering (ICEBE)
- George Edwards, Leslie S. Liu, and Randy Moulic | October 2008
Proxima: A Mobile Augmented-Image Search System
Proceedings of the ACM International Conference on Multimedia (ACMMM)
- George Edwards and Nenad Medvidovic | September 2008
A Methodology and Framework for Creating Domain Specific Development Infrastructures
Proceedings of the 23rd IEEE ACM International Conference on Automated Software Engineering (ASE)
- Chiyong Seo, George Edwards, Sam Malek, and Nenad Medvidovic | February 2008
A Framework for Estimating the Impact of a Distributed Software System's Architectural Style on its Energy Consumption
Proceedings of the Working International Conference on Software Architecture (WICSA)
- George Edwards, Chiyong Seo, and Nenad Medvidovic | August 2007
Construction of Analytic Frameworks for Component-Based Architectures
Proceedings of the Brazilian Symposium on Software Components, Architectures and Reuse (SBCARS)
- Gan Deng, Ming Xiong, Aniruddha Gokhale, and George Edwards | May 2007
Evaluating Real-time Publish/Subscribe Service Integration Approaches in QoS-enabled Component Middleware
Proceedings of the 10th IEEE International Symposium on Object-oriented Real-time Distributed Computing (ISORC)
- George Edwards, Sam Malek, and Nenad Medvidovic | March 2007
Scenario-Driven Dynamic Analysis of Distributed Architectures
Proceedings of the 10th International Conference on Fundamental Approaches to Software Engineering (FASE)
- George Edwards, Gan Deng, Douglas C. Schmidt, Aniruddha Gokhale, and Balachandran Natarajan | October 2004
Model-Driven Configuration and Deployment of Component Middleware Publisher/Subscriber Services
Proceedings of the 3rd ACM International Conference on Generative Programming and Component Engineering (GPCE)
- George Edwards, Douglas C. Schmidt, Aniruddha Gokhale, and Bala Natarajan | April 2004
Integrating Publisher/Subscriber Services in Component Middleware for Distributed Real-time and Embedded Systems
Proceedings of the 42nd Annual ACM Southeast Conference (ACMSE)

Workshop Papers

- Arman Shahbazian, George Edwards, Nenad Medvidovic | May 2016
An End-to-End Domain Specific Modeling and Analysis Platform
8th Workshop on Modelling in Software Engineering (MiSE)
- Chiyong Seo, George Edwards, Daniel Popescu, Sam Malek, Nenad Medvidovic | August 2009
A Framework for Estimating the Energy Consumption Induced by a Distributed System's Architectural Style
8th Workshop on Specification and Verification of Component-Based Systems (SAVCBS)

- George Edwards, Joshua Garcia, Hossein Tajalli, Daniel Popescu, Nenad Medvidovic, Gaurav Sukhatme, and Brad Petrus | May 2009
Architecture-Driven Self-Adaptation and Self-Management in Robotics Systems
Proceedings of the Workshop on Software Engineering for Adaptive and Self-Managing Systems (SEAMS)
- Ivo Krka, Leslie Cheung, George Edwards, Leana Golubchik, Nenad Medvidovic | June 2008
Architecture-Based Software Reliability Estimation: Problem Space, Challenges, and Strategies
Proceedings of the Workshop on Architecting Dependable Systems (WADS)
- George Edwards, Chiyong Seo, Daniel Popescu, Sam Malek, Nenad Medvidovic | November 2007
Self-* Software Architectures and Component Middleware in Pervasive Environments
Proceedings of the 5th International Workshop on Middleware for Pervasive and Ad-Hoc Computing (MPAC)
- Chiyong Seo, Sam Malek, George Edwards, Daniel Popescu, Nenad Medvidovic, Brad Petrus, and Sharmila Ravula | May 2007
Exploring the Role of Software Architecture in Fault-Tolerant and Dynamic Pervasive Systems
Proc. of 1st Workshop on Software Engineering of Pervasive Computing Applications, Systems and Environments

Book Chapters

- Ivo Krka, George Edwards, Leslie Cheung, Leana Golubchik, and Nenad Medvidovic | 2009
A Comprehensive Exploration of Challenges in Architecture-Based Reliability Estimation
Architecting Dependable Systems 6, R. de Lemos, J.-C. Fabre, C. Gacek, F. Gadducci, M. ter Beek (Eds.)

Posters And Demonstrations

- **BlueStar Mobile Management Services**
IBM Research Technology Fair | June 2008
- **The Extensible Tool-chain for Evaluation of Architectural Models**
USC Center for Software and Systems Engineering Convocation | October 2006
- **A Model-Driven Framework for Architectural Evaluation of Mobile Software Systems**
UCI Institute for Software Research Forum | April 2006

Invited Talks

- **Metamodeling-Enabled Model-Checking for Complex Systems**
Systems Engineering Research Center (SERC) Annual Research Review | November 2010
- **XTEAM: Automated Synthesis of Domain-Specific Code Generators**
Northrop Grumman Technology Day Research Showcase, Information Systems Track | May 2010
- **Domain-Specific Model Analysis and Code-Generation Frameworks**
Ground Systems Architecture Workshop (GSAW), Architecture-Centric Evolution (ACE) Working Group | March 2010
- **Automated Analysis and Code Generation for Domain-Specific Models**
USC Computer Science Department Annual Research Review | March 2010
- **Automated Analysis and Code Generation for Domain-Specific Models**
USC Center for Software and Systems Engineering Annual Research Review | March 2010

- **Model-Driven Analysis Frameworks for Embedded Systems**
USC Center for Software and Systems Engineering Annual Research Review | March 2009
- **Creating Domain-Specific Development Infrastructures**
USC Center for Software and Systems Engineering Annual Research Review | March 2008
- **Weighing Architectural Trade-offs with XTEAM**
USC Center for Software and Systems Engineering Annual Research Review | February 2007

Technical Reports

- George Edwards, Yuriy Brun, and Nenad Medvidovic | August 2010
Automated Analysis and Code Generation for Domain-Specific Models
Technical Report USC-CSSE-2010-517, Center for Software and Systems Engineering, University of Southern California
- George Edwards and Nenad Medvidovic | July 2009
Model Interpreter Frameworks
Technical Report USC-CSSE 2009-514, USC Center for Software and Systems Engineering, Center for Software and Systems Engineering, University of Southern California
- George Edwards and Nenad Medvidovic | May 2009
A Highly Extensible Simulation Framework for Domain Specific Architectures
Technical Report USC-CSSE-2009-511, Center for Software and Systems Engineering, Univ. of Southern California
- Yuriy Brun, George Edwards, and Nenad Medvidovic | May 2009
Injecting Robustness into Autonomic Grid Systems
Technical Report USC-CSSE-2009-510, USC Center for Software and Systems Engineering, University of Southern California

Patent Applications

- **Method and Apparatus for Simulation of Domain-Specific Models**
U.S. Provisional Patent Application 61/513,357, filed July 29, 2011. (abandoned)
- **Extensible Collaborative Software Modeling**
U.S. Patent Application 13/271,008, filed October 11, 2011. (abandoned)

Honors and Awards

- **2008 USC Computer Science Outstanding Student Research Award**
Awarded each year for exceptional research achievement by a graduate student in computer science.
- **Annenberg Graduate Fellowship** | August 2007
Supports highly qualified graduate students to conduct cutting-edge communication and digital media research and advance important new programs in the communications arena.
- **USC Viterbi School of Engineering Dean's Doctoral Fellowship** | May 2004
Supports world-class students for four years in the pursuit and publication of research leading to the doctoral degree.
- **Vanderbilt Summa Cum Laude Graduate** | August 2003
Awarded to graduates whose grade point average equals or exceeds that of the top 5 percent of the previous year's graduating seniors.

- **NSF Research Experiences for Undergraduates Grant** | June 2003
Supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation.
- **Vanderbilt Dean's List with High Honors** | Dec 2000, May '01, Dec '01, May '02, Dec '02, May '03
Recognizes outstanding academic performance in a semester. Students are named to the Dean's List when they earn a grade point average of at least 3.500.
- **Vanderbilt School of Engineering Merit Scholarship** | May 2000
Awarded to approximately 5 percent of all applicants based on exceptional accomplishment and high promise in intellectual endeavors.
- **National Merit Scholar** | May 2000
Awarded for academic achievement to 8,200 high school students each year out of 1.5 million entrants.

Teaching

Lecturer, CSCI 102–Data Structures | Fall 2012

Lecturer, CSCI 568–Requirements Engineering | Spring 2012, Spring 2013, Spring 2014, Spring 2015, Spring 2016

Teaching Assistant, Infosys Intensive Course on Software Architecture | December 2009

Guest Lecturer, CSCI 589–Software Engineering for Embedded Systems | Fall 2007, Fall 2008

Guest Lecturer, CSCI 377–Introduction to Software Engineering | Fall 2007, Fall 2008, Fall 2009

Guest Lecturer, SAE 599–Model-Driven Systems Architecture | Summer 2007, Spring 2008

Teaching Assistant, CSCI 589–Software Engineering for Embedded Systems | Fall 2006

Research Community Service

- Reviewer for the **Journal of Systems and Software**, Elsevier | 2010–2013
- Reviewer for **IEEE Transactions on Software Engineering (TSE)** | 2010–2012
- Reviewer for the **50th International Conference on Objects, Models, Components, Patterns (TOOLS Europe)**
Prague, Czech Republic | May 28–June 1, 2012
- Program Committee Member for the **Research in Applied Computation Symposium (RACS)**
Miami, FL | November 2–5, 2011
- Reviewer for the **Workshop on Software Engineering for Adaptive and Self-Managing Systems (SEAMS)**
Cape Town, South Africa | May 3–4, 2010
- Reviewer for the **24th IEEE/ACM International Conference on Automated Software Engineering (ASE)**
Auckland, New Zealand | November 1–20, 2009
- Reviewer for **DSN 2009 Workshop on Architecting Dependable Systems (WADS)**, Lisbon, Portugal | June 29, 2009
- Reviewer for **Architecting Dependable Systems 6**, Springer Publishing | 2009
- Reviewer for the **6th IEEE International Conference on Autonomic Computing (ICAC)** | June 15–19, 2009
- Reviewer for **IEEE Software Special Issue: Domain-Specific Languages & Modeling** | July/August, 2009

- Reviewer for the **23rd International Conference on Automated Software Engineering (ASE)**
L'Aquila, Italy | Sept. 15–19, 2008
- Reviewer for the **Working IEEE/IFIP Conference on Software Architecture (WICSA)**
Vancouver, Canada | February 18–21, 2008
- Program Committee Member for the **Institute for Software Research (ISR) Graduate Student Research Symposium (GSRS)**, Irvine, CA | June 1, 2007
- Reviewer for the **3rd International Conference on the Quality of Software Architectures (QoSA)**
Boston, MA | July 12–13, 2007
- Reviewer for the **10th International ACM SIGSOFT Symposium on Component-Based Software Engineering (CBSE)**,
Boston, MA | July 9–11, 2007
- Reviewer for the **First IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO)**
Boston, MA | July 9–11, 2007
- Reviewer for the **Second Workshop on Sharing and Reusing Architectural Knowledge - Architecture, Rationale, and Design Intent (SHARK/ADI)**, Minneapolis, MN | May 19–20, 2007
- Reviewer for the **Workshop on Tools, Operating Systems and Programming Models for Developing Reliable Systems (TOPMoDeIS)**, Long Beach, CA | March 26–30, 2007

Professional Associations

- **Member**, Association for Computer Machinery (ACM) and ACM Special Interest Group on Simulation and Modeling
- **Member**, IEEE Computer Society