

Hiroshi Wada

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OBJECTIVE Seeking a challenging position in research and development where my expertise in model-driven development, service oriented architecture and cloud computing can be effectively utilized to advance company's innovations.

SUMMARY OF QUALIFICATIONS

- **Published 20+ peer-reviewed papers and awarded 4 best papers** in various research fields including model-driven development and distributed computing. **Number of papers are accepted in top-tier conferences.**
- **Strong knowledge and research experience** in software engineering (e.g., model-driven development and domain specific languages), distributed computing (e.g., service oriented architecture, cloud computing and CORBA), autonomic computing and sensor networks.
- **5+ years' experience in consulting and educational services** on software modeling and distributed computing. Provided over 100 short courses to professional institutions.

EDUCATION

- Ph.D. in Computer Science – GPA: 3.8/4.0 (September 2005 – December 2009)
 - Department of Computer Science, University of Massachusetts, Boston
- M.S. and B.S. in Computer Science – GPA: 3.7/4.0 and 3.7/4.0 (April 1996 – March 2002)
 - Department of Information and Computer Science, Keio University, Japan
 - M.S. thesis: "A Framework for Model-Driven Distributed Systems"
 - B.S. thesis: "Lego ORB Framework: A Framework for Component-based CORBA ORBs"

RESEARCH EXPERIENCE

- Design a **UML profile for non-functional properties** and implement code generator for Enterprise Service Buses. Design and implement an **aspect oriented language for Business Process Modeling Notation**. (2006 – 2008)
- Design and implement two model-driven development frameworks: a **UML model execution engine** and a **code generator leveraging attribute-oriented programming**. (2005)
- Investigate a method for **optimizing the performance of multi-tier applications in a cloud environment** by leveraging queuing theory and genetic algorithm. (2008 – 2009)
- Investigate methods of **performance estimation in autonomic computing**. Patented. (2007)
- Design and implement a **domain specific language for sensor networks**. (2007)

AWARDS AND HONORS

- **Best Paper Awards**
 - IEEE International Conference on Services Computing (2007)
 - Ph.D. Symposium of the IEEE Int'l Conf. on Computer Software and Applications (2006)
 - World Multi-Conference on Systemics, Cybernetics and Informatics (2005)
 - JSSST Conference on Systems for Programming and Applications (2005)
- **Research Excellence Award**, Doctoral Research Symposium, University of Massachusetts Boston, Department of Computer Science (2008)
- **Best Undergraduate Student Award**, Department of Information and Computer Science, Keio University (2000)

- SELECTED PUBLICATIONS
- **H. Wada**, J. Suzuki and K. Oba, "Leveraging Early Aspects in End-to-End Model Driven Development for Non-Functional Properties in Service Oriented Architecture," In *J. of Database Management Special Issue on Service-Oriented Computing*, IGI Global, 2009.
 - **H. Wada**, J. Suzuki and K. Oba, "A Model-Driven Development Framework for Non-Functional Aspects in SOA," In *Int'l J. of Web Services Research*, 5(4), 2008.
 - **H. Wada**, C. Lee, J. Suzuki and T. Otani, "iNetLab: A Model-Driven Development Environment for Biologically-Inspired Autonomic Network Applications," In *M. K. Denko, et al. (eds.) Autonomic Computing and Networking Advances*, Springer, 2009.
 - **H. Wada**, J. Suzuki and K. Oba, "Queuing Theoretic and Evolutionary Deployment Optimization with Probabilistic SLAs for Service Oriented Clouds," In *IEEE Int'l Workshop on Cloud Services*, 2009. **(18% acceptance rate)**
 - **H. Wada**, J. Suzuki and K. Oba, "A Feature Modeling Support for Non-Functional Constraints in Service Oriented Architecture," In *IEEE Int'l Conf. on Services Computing*, 2007. **(20% acceptance rate) BEST PAPER AWARD**
 - **H. Wada** and J. Suzuki, "Modeling Turnpike Frontend System: a Model-Driven Development Framework Leveraging UML Metamodeling and Attribute-Oriented Programming," In *ACM/IEEE Int'l Conf. on Model Driven Engineering Languages and Systems*, 2005. **(27% acceptance rate)**
- PROFESSIONAL EXPERIENCE
- **Technical Director** – Object Technology Institute, Inc., Tokyo, Japan (2003 – 2005)
 - Helped the company's clients develop and enhance their enterprise systems with emerging technologies through consulting and educational services. Developed and provided over 100 short courses to professional institutions including Hitachi, NTT Data and Fujitsu.
 - Reviewed Object Management Group's certification examinations of Unified Modeling Language and translated them. More than 10,000 people have taken the examinations since December 2003. Provided educational consulting on the examinations to professional institutions and educational service providers. Published a book.
 - Published over 90 trade journal papers covering UML, J2EE and SOA. Interviewed, as an expert of object-oriented technology, for Object Technology magazine.
 - **Technical Manager** – Object Management Group Japan, Inc., Tokyo, Japan (2000 – 2003)
 - Transferred OMG's technologies to its current and prospective members in Japan.
 - Designed three online courses on OMG's technologies. This project was funded by the Information Technology Promotion Agency, Japan, which is similar to NSF in the US. The courses was provided online and over 8,000 users registered.
 - **Chief Programmer** – Planet Computer, Co., Ltd., Kanagawa, Japan (1997 – 2000)
 - Developed various office productivity products on Adobe Acrobat, such as multi-user layer management systems, drawing tools and printing management systems using C++.
 - Started as a programmer, later promoted to a chief programmer, and also appointed as a co-project lead in several projects.
- TECHNICAL SKILLS
- Java, C, C++, Ruby, Perl, Python, CORBA, J2EE, Web Service technologies, UML, BPMN, Eclipse Modeling Framework, deep knowledge in operating systems implementation and networking