Matthew J. Barga

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INTERESTS

I have a strong background in mathematics and statistical algorithm design and a determination to use these skills to realize tangible business value. Recent work projects have enabled me to learn technologies such as Hadoop and Spark that allow for the scaled application of such skills.

EDUCATION

The University of Tokyo, Tokyo, Japan . . . . **Sept. 2014**

Master of Science - Computer Science (advisor: Reiji Suda)   **3.92 GPA**

- Japanese Govt. Monbukagakusho (MEXT) Research Scholarship Recipient
- Research activities in parallel computing and machine learning (thesis on Bayesian networks)

Purdue University, West Lafayette, Indiana . . . . **May 2011**

Bachelor of Science - Computer Engineering; Minor in Mathematics   **3.47 GPA**

- Discovery Park Undergraduate Research Internship (DURI) Participant

SKILLS

Advanced:	Java, Python, Unix shell scripting
Intermediate:	C, JavaScript, HTML
Web:	Django, Spring/Hibernate, Apache/Tomcat
Big Data:	Apache Spark, Hadoop/MapReduce
Database:	MySQL, MongoDB, Hive

Source code samples are available on my github (username: mbarga)

EXPERIENCE

Software Engineer - Rakuten, Tokyo, Japan . . . . **Apr. 2015 - Present**

- Carry out frequent reporting and operations for targeted digital marketing on a 50TB platform of customer clickstream data
- Work frequently with internal business unit to build a Demand Side Platform (DSP) tool tailored to their needs
- Improved attention for detail through a fast paced release cycle and ongoing software integration with multiple marketing tool APIs

Software Engineer - Capy, Tokyo, Japan . . . . **Dec. 2013 - Mar. 2015**

- Improved latency and security of the featured python web application
- Refactored project infrastructure and test suite to allow for pain-free development of future extensions
- Implemented and maintained many core application features

System Developer - Technology Services Group, Chicago, IL . . . . **Sept. 2011 - Mar. 2012**

- Cooperated on roughly four, 1-2 month projects for different clients as a technology consultant
- Created custom web-based applications for enterprise content management with a focus on Java back-end development, and minimal front-end interface design using common web technologies (JavaScript, jquery, knockout, HTML/css)
- Customized open source Java-based content management solutions (Documentum and Alfresco), as well in-house software offerings for client needs

ACTIVITIES

Hands on Tokyo volunteer
Continuing education (Edx, Coursera) in bioinformatics and functional programming (Scala)

HONORS

Japanese Govt. Monbukagakusho (MEXT) Research Scholarship 2012-2014, Purdue DURI Scholarship (Lilly Endowment) 2010-2011, Japan Student Services Organization (JASSO) Scholarship 2008-2009