

Akshay Viswanathan

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<https://github.com/akshayv>

Efficient, highly-motivated, hard-working with 3+ years of experience. Capable of adapting to various software development processes and technologies.

Professional Experience

Visa Inc.

Singapore, Singapore

Software Engineer

July 2015 - Present

- Part of Open Systems Developments - Debit Processing Services (DPS) Team
- Involved in development of the Client Administrative Tools and Services (CATS) portal and services.

Gavagai AB

Stockholm, Sweden

Gavagai AB is a Stockholm based startup which performs big data analytics on large incoming data streams, in real time, using unsupervised machine learning algorithms.

Software Developer

July 2013 - June 2015

- Part of continuous delivery/agile process
- Accomplishments:
 - Introduced system-wide integration tests using the Arquillian framework
 - Initiated and facilitated system-wide migration of cache implementation
 - Implemented a scalable solr-indexing scheme to speedup word comparison and retrieval

Intern

August 2012 - June 2013

- Introduced to agile and lean-startup methodologies
- Involved in development of products, core technology and algorithms
- Hired as full time employee after duration of internship
- Accomplishments:
 - Used Google Web Toolkit, Bootstrap and HTML5 to develop the GUI in different portions of the system
 - Involved in development of the RESTful API using the JBOSS RESTEasy framework
 - Involved in migration of system from JBOSS 5 to JBOSS 7
 - Facilitated integration with Apache Solr as a datastore using the SolrJ library
 - Facilitated integration with Liquibase for database schema refactoring and versioning

IBM Singapore

Singapore, Singapore

Intern

May 2012 - July 2012

Developed a web portal for the Sales and Marketing division of IBM Singapore to display aggregated data from several databases, to replace the existing Excel spreadsheet solution.

- Accomplishments:
 - Aggregated data from several IBM sales databases (DB2, SQL Server) and displayed them
 - Implemented a login system for the portal with different levels of access and corresponding features
 - Developed a bug tracker for the same portal to allow user feedback and feature requests

Research

Scaling up Machine Learning Techniques via Parallelization for Large Data

June 2014 - April 2015

Final Year Dissertation at National University of Singapore.

Formulated and implemented a novel Parallel Support Vector Regression algorithm to ensure scalability of the Support Vector Regression algorithm for large data, through usage of Parallel Computing and Matrix Approximation techniques.

Indoor Navigation Assistance for Visually Impaired

June 2014 - November 2014

Designed and developed a wearable belt equipped with ultrasonic sensors, Arduino and RaspberryPi to assist with obstacle detection and indoor navigation for the visually impaired.

Education

National University of Singapore

Singapore, Singapore

August 2010 - June 2015

- Undergraduate Studies, Bachelor's Degree in Engineering.
- Major Computer Engineering; Specialization in Large-Scale Computing.
- Minor in Technopreneurship.
- Graduated with First Class Degree with Honours (Highest Distinction); CAP: 4.68/5.00
- Achievements:
 - Recipient of Dean's List Award (Top 5% of the cohort) - Academic Year 2011/12 Semester 1
 - Recipient of Dean's List Award (Top 5% of the cohort) - Academic Year 2011/12 Semester 2
 - Recipient of Dean's List Award (Top 5% of the cohort) - Academic Year 2013/14 Semester 2
 - Recipient of Dean's List Award (Top 5% of the cohort) - Academic Year 2014/15 Semester 1
 - Recipient of Dean's List Award (Top 5% of the cohort) - Academic Year 2014/15 Semester 2
 - Recipient of NUS Overseas Colleges (NOC) scholarship
 - Secretary, NUS Sathya Sai Society - Community Service

KTH Royal Institute of Technology

Stockholm, Sweden

August 2012 - June 2013

- Exchange Studies, Computer Science

Stockholm School of Entrepreneurship

Stockholm, Sweden

August 2012 - June 2013

- Exchange Studies, Entrepreneurship/Entrepreneurial Studies

Technical Skills

- **Programming Languages:** Java, Java Enterprise Edition, C++, C#, C, Python
- **Web Development:** HTML5, CSS3, Javascript, JSP, ASP, Google Web Toolkit
- **Database Technologies:** MySQL, PostgreSQL, SQLite, Apache Solr, Redis, Cassandra, ElasticSearch, MongoDB
- **Application Development:** Android, Windows Phone
- **Tools and Frameworks:** Subversion, Git, JUnit, TestNG, JBOSS, Liquibase, Jenkins, EhCache, Maven, Selenium, Apache Tomcat, Maven, OpenCL, OpenGL, VHDL (Hardware Description), Shell Scripting, MPI
- **Operating Systems:** Linux, OSX
- **Other:** Machine Learning, Parallel Computing, Distributed and Scalable Systems, Computational Linguistics, Computer Networks