

SKILLS

Programming Languages: Java, Javascript, Ruby, C++/C, Python, SQL, PHP, Assembly

Product Design, Prototyping, and Development:

- Web Application Development: Spring, Node.js, Ruby on Rails
- Frontend Development: HTML5, CSS, Javascript, JQuery, AngularJS, GWT, Twitter Bootstrap
- Test-driven Development (TDD).
- Object-oriented Design Patterns.
- Building and working with RESTful APIs.
- HTML Mobile App Development: PhoneGap/Cordova
- Databases: PostgreSQL, MySQL, MongoDB
- Wireframing: Balsamiq Mockups
- Templating: Handlebars, Liquid
- Preprocessors: Coffeescript, Sass, HAML, Markdown

Search and Relevance Concepts and Technologies:

- Full-text and Geospatial search using Hibernate Search, Elasticsearch, and Lucene.

Geospatial data and Geographic Information Systems (GIS):

- Geographic data storage and querying with PostGIS (Geospatial module for PostgreSQL) and Lucene.
- Geographic data manipulation using GIS toolkits such as GeoTools in Java.
- Working with Geocoding and Mapping APIs as well as standard data formats such as KML and GeoJSON.

Development Environment Setup:

- Virtualization and Provisioning: Vagrant and Shell script.
- Version Control: Git
- IDEs/Editors: Eclipse, Vim, Sublime Text
- Operating Systems: Linux, Windows UI

WORK EXPERIENCE

Software Engineer at Nterop Apr 2012 - Present | Ottawa, ON

- Delivering features in the entire software stack in a Scrum team using Java, Spring, Hibernate, Maven, Postgresql, PostGIS, GWT, HTML, CSS, Javascript, PhoneGap, Linux, Bash, and Balsamiq Mockups.
- Performing requirements analysis, prototyping, product design and implementation, testing, documentation, release, deployment, and maintenance of Nterop's application suite.
- Having ownership of several critical parts of the application suite including Maps and GeoSpatial features, Authentication and Access Control, and Search and Relevance.

Software Engineer Intern at Facebook Jan 2011 - Apr 2011 | Palo Alto, CA

- Performed backend and frontend development using PHP, HTML, CSS, and Javascript.
- Worked on requirements analysis, design and implementation of a new type of Ad unit in an Agile environment.
- Co-developed a feature for adding friends using QR codes as part of a Facebook Hackathon.

Consulting Software Engineer at Tejarat Consulting Engineers Feb 2009 - Jul 2009 | Tehran, Iran

- Performed Requirements Analysis for banking softwares.
- Assisted in development of a tool, written in C and Java, used for automated migration of a legacy banking storage system to relational database.

MOHAMAD AHMADI

<http://moeahmadi.com> | mohamadhasan.ahmadi@gmail.com | +1 613 406 8281 | Ottawa, ON

Research Assistant Intern at Technical University of Ilmenau Jul 2008 - Sep 2008 | Ilmenau, Germany

- Used C++ and OMNeT++ Network Simulator to simulate and benchmark potential malicious behaviours and appropriate countermeasures in a distributed Network Coordinates system.

EDUCATION

MMath in Computer Science at the University of Waterloo Sep 2009 - Mar 2012 | Waterloo, ON

As a member of the Information Retrieval Lab, my research was focused on statistical and unsupervised approaches to Natural Language Processing and Information Extraction:

- Developed a learning agent in Python to automatically extract favorable and unfavorable aspects of a restaurant from customer reviews given a small set of dish names.
- Modeled a POMDP decision making agent for Insulin Therapy.
- Participated in Named Entity Recognition track of Text Retrieval Conference (TREC).

B.Eng. in Computer Engineering at the University of Tehran Sep 2004 - Feb 2009 | Tehran, Iran

Developed a strong foundation in computer science and a broad understanding of software engineering, its tools and methodologies through a world-class curriculum and numerous projects:

- Implemented an e-commerce website with inventory and order management using Struts2, Hibernate, JSP, and Ajax.
- Developed a mini database in Java supporting common SQL commands, locking, hashing, and B+tree indexing.
- Implemented a full compiler in Java for a java-like OO programming language.
- Implemented a GUI FTP Client and Server, covering common FTP commands using Java and Swing.
- Implemented the complete TCP Protocol over UDP in java.
- Implemented a Remote Shell using Remote Procedure Call (RPC) in Java.
- Developed a data Compression/Decompression software based on Huffman Algorithm in C++.
- Developed a 2D multiplayer strategy game in C++.

As a member of the Database Lab, collaborated in a number of projects on Data Mining, Information Retrieval, and Text Classification:

- Improved an Ant Colony optimization algorithm for the task of detecting trends in spatial Databases.
- Assisted in development of a standard Persian text corpus and used it to benchmark various text classification algorithms on Persian text.
- Implemented and evaluated different Query Expansion methods on Lucene search engine.
- Attended the Cross Language Evaluation Forum (CLEF) competitions.

AWARDS AND ACHIEVEMENTS

University of Waterloo Graduate Student Entrance Award 2009-2011

Graduated as the 5th top student among over 100 Computer Engineering students. 2009

University of Tehran's Faculty of Engineering Award for the highest yearly GPA. 2008

Ranked 230th in nationwide university entrance exam among over 400000 participants. 2004

LANGUAGE SKILLS

English (Native fluency), Persian (Native), Portuguese (Learning)