

Abhishek Madhusudhan

CS GRADUATE STUDENT | SOFTWARE ENGINEER

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An application developer with 3 years of professional programming experience in an agile environment. Actively seeking opportunities in software development.

Education

M. S. in Computer Science **2016 - 2018**
George Mason University (**GPA: 3.5**)

B.E. in Computer Science **2010 - 2014**
Visvesvaraya Tech. University

Experience

GMU | Graduate Teaching Assistant **2017 - 2018**

- Teaching Object Oriented Techniques for problem solving and implementation of algorithms using JAVA.

IBM GBS | Software Engineer **2014 - 2016**

- Worked as an application developer implementing core functionalities.
- Redesigned to remove critical dependency on a middleware application by directly interfacing with it to obtain its service.
- Automated web service calls to reduce faulty data from **10% to 3%**.

Publication

- Published an article about the research project (**State of the Union**) on "predictiveanalyticsworld.com".

Certifications

- Oracle Certified Professional JAVA SE 6 Programmer.
- Oracle Certified JAVA EE 6 Application Developer.
- Coursera Android Application Development.

Awards

- Consecutively awarded "manager's choice" for 2 years and a "deep skill" award for sharing expertise.

Skills

Programming & Databases

- | | | |
|-----------------|----------|-------------|
| • JAVA | • C | • SQL |
| • REST, SOAP WS | • LISP | • JDBC |
| • Swing | • Python | • Hibernate |

UI, Scripting & Web

- | | | |
|------------------|------------|----------------|
| • HTML, CSS | • JSP, JSF | • AWS, EC2, S3 |
| • Javascript ES6 | • JQuery | • Git |
| • Bootstrap | • JSON | |

Projects

State of the Union

Developed a dashboard and implemented a Text-Mining system to obtain political insights from public data.

Neural Net System

Implemented a neural network system using LISP to learn solutions and improve accuracy by providing weights and updating them through forward and back propagation.

Ripple Wallet

Researched Blockchain technologies and developed a web wallet for ripple cryptocurrency.

Evolutionary Genetic Algorithm

Implemented an Evolutionary Computation Genetic Algorithm using LISP to find the best solution through various exploration and exploitation mechanism.

Tetris AI

Developed an AI using genetic algorithm to evolve a set of heuristic weights maximizing the fitness value and generating a model which will be used to play the game.

Survey Web Application

Developed and deployed Web Application on AWS EC2 to survey by collecting and storing data from the user.

Connect 4 AI

Developed an AI using minmax algorithm to generate a winning move in the game. Also improved performance by using alpha-beta pruning. The AI won against other Connect 4 AI developed in a class competition.

Partial Order Planner

Implemented a brute force planner to resolve 2 & 3 block world problems by creating a complete plan consisting of the start and goal conditions.

Portfolio | www.abhimadhu.com

Designed & Developed a personal website using Bootstrap, Google MDL framework. Deployed using Amazon AWS EC2 with routing configurations between Route 65 and Google Domains.

Nim AI

Implemented an AI using LISP to learn the game of NIM through reinforcement learning capable of winning against a human adversary.