302, Ball Street, Gardens Apartment, #L312, College Station, Texas

# **AVINASH**

avinash13.tamu@gmail.com

Phone: 9797398030 Fall 2017- current

Texas A&M University, College Station, Texas

Master of Science in Computer Science, GPA: (3.67/4.00)

Indian Institute of Technology, Kharagpur, India

Fall 09-Fall 14

Integrated MSc. (Honors) in Mathematics & Computer Science (Rank: 4th)

(Ranked within top 0.1% of 0.4 million students who wrote Joint Entrance Examinations)

Website: <a href="http://www.avinashsaxena.com">http://www.avinashsaxena.com</a> GitHub: <a href="https://github.com/avinsaxe">https://github.com/avinsaxe</a>

PUBLICATION: Avinash Saxena & S Rao, http://www.worldscientific.com/doi/abs/10.1142/S0218539314500120

SKILLS Languages: Java, Python, SQL, C, Ruby on Rails, C++, MongoDB, HAML/HTML, CSS, jQuery, JavaScript

Technologies/OS: Spring, Apache, Linux, Servlets, CI (Travis), CODECLIMATE, Linux/Ubuntu, Windows

### **INDUSTRY EXPERIENCE**

Software Developer Oracle India (~3 years), Fall 2014-Fall 2017

Oracle Document Cloud Service (ODCS)

- Conceptualized, designed and implemented the entire backend system from scratch for ODCS integration with MFT in JAVA.
- Achieved file CRUD operation functionality by creating file upload and download endpoints using REST APIs exposed by ODCS.
- Supported pagination for large responses; Supported large file payload transfer; Enabled scheduling and event-based transfer.
- Implemented regular expression-based search for transfer-metadata. Used caching to store and fetch results quickly.

### Oracle Experience & Integration Cloud Service

- Developed over **30 REST APIs** in less than 1.5 months. Exposed SFTP server parameters of free space, total space and users.
- Modeled data synchronization across the cluster using cloud database. Devised schedule-based and event-based triggers to update the cloud database with most recent values.

# Managed File Transfer (MFT)

- **Automated installation** of Managed File Transfer product using **Python** and **Shell** scripts. Significantly improved testing efficiency of QA, by cutting the time for manual creation of the domains. (~90% of setup cost)
- Designed and implemented a new filesystem framework to meet the diverse requirements of file-system integration on cloud

## **INTERNSHIP**

# Software Developer, Intern Barclay's Technology Domain (~3 months), May 2012 – July 2012

Developed a tool to parse websites, collect and compare information from the parsed data, and send relevant updates to customers. Supported both **EMAIL** and **SMS** based updates in JAVA using **publisher-subscriber** model.

# Research Assistant University of Auckland, New Zealand (~3 months), May 2011-July 2011

- Analyzed and implemented algorithms in domain of voting theory; Predicted results of poll based on voter's preferences
- Bolstered improvement in time complexity using approach analogous to Branch & Bound. (~50% reduction)

### **ACADEMIC PROJECTS**

- Developed a website in Ruby on Rails for a startup. I developed secure profile creation and sign-up using Facebook Login &
  Signup API, social features of upload and update photos, share profile, and search profile.
- Enabled Continuous Integration and Code-Climate support, for equipping teams with automated build check before merge
- Designed Logistic Regression, CKY algorithm, Maximum Entropy Models in Python; ~84% accuracy achieved.
- Analyzed and Implemented classification algorithms in Python to identify popular news articles & assess sentiment of reviews.
- Ideated and developed a tool to identify **Mathematical Expressions** from text using novel **NLP based approaches**. Utilized DFS, tree-traversal along with syntactical parsing, to generate accurate mathematical expressions within seconds from text.

## **NON-ACADEMIC PROJECTS**

- Developed a tool to generate a UI tour for products at **Oracle Hackathon**, using jQuery, JAVA and JS in 20 hours.
- Designed an **Artificial Intelligence** based tool to perform negotiation with other players to buy and sell stocks during **Hackathon at IIT Kharagpur**, winning Silver amongst 40 participating teams with a total of 200 participants.
- Contributed to RipMe an Open-Source JAVA based desktop tool, that downloads images from specific websites.

## **ACHIEVEMENTS**

- Awarded fellowship for summer internship at International Institute of Information Technology, Bangalore.
- Recipient of Northern Hemisphere Summer Research scholarship grant for research and development at university of Auckland
- Recipient of I.N.S.P.I.R.E scholarship from Department of Science and Technology, awarded to meritorious students
- Served as Hall President, highest elected post of responsibility at IIT Kharagpur; Managed over 100+ events & over 700 students