

Education

George Mason University, Fairfax, USA
Master of Science in Computer Science

Aug 2018 – May 2020
GPA: 3.87

Relevant Coursework: Database Management Systems, Software Engineering for World Wide Web, Systems Programming, Computer Vision, Visual Analytics, Mathematical Computations in Computer Science, Component-based Software Development, Instructable Cognitive Agents

Mahindra École Centrale, Hyderabad, India
Bachelor of Technology in Computer Science

Aug 2014 – May 2018
GPA: 3.84

Relevant Coursework: Probability and Statistics, Cloud Computing, Web Programming, Object-Oriented Programming, Analysis of Algorithms, Mobile Computing, Machine Learning, Data Mining

Work Experience

Gridpoint Inc, Reston, VA, USA
Software Engineer

July 2020 – Present

- Currently working on optimizing and refactoring the reports service by developing new schemas and complexity based queues to deliver reports to the customers with minimum possible processing time.
- Reduced the execution time of reports from 4 minutes to 50 seconds by creating views with column indexing and Java Consumers
- Created a dashboard to validate the information of 20,000 customer sites using cron jobs, which significantly reduced the time taken to find invalid sites.
- Developed a spring batch to refactor the data of two databases by migrating the metadata to a new database and the corresponding files to Amazon S3. This migration resulted in reducing the time taken for database calls, which improved user experience.
- **Technology Stack:** Spring, Hibernate, Angular, PSQL, Hazelcast queue, MySQL, Restful API, jQuery, Git, Bash, Amazon S3

Oracle, Reston, VA, USA
Software Development Engineer Intern

May 2019 – Aug 2019

- Developed a robust automation pipeline for migrating 40 TB of source code repositories to Oracle Cloud Infrastructure server with more restrictive space requirements.
- Utilized Web APIs to synchronize user and permission data to ensure minimal impact and downtime for end-users.
- **Technology Stack:** Ruby, bash script, Teamcity, MySQL

George Mason University, Fairfax, USA
Graduate Teaching Assistant

Jan 2019 – May 2020

- Responsible for teaching students concepts in software design and development of client-side and server-side models like MVC Architecture and MVC-based frameworks such as Apache Struts2, JDBC, JPA, Enterprise Java Beans, and RESTful Web services.
- Helped students in project work, designed and developed test cases to evaluate projects.
- **Technology Stack:** HTML5, CSS3, JavaScript, Bootstrap, Ajax, jQuery, Angular 6, TypeScript, J2EE, JPA, EJB

Krasnow Institute of Advanced Study, Fairfax, USA
Web Developer

Aug 2018 – Dec 2018

- Enhanced and maintained a Neuroinformatics web-based resource (hippocampome.org) by cooperating with researchers to match visual design intent.
- Written well designed, testable code by utilizing the knowledge of various web technologies.
- **Technology Stack:** Python, Django, Apache HTTP Server, JavaScript, HTML, CSS, MongoDB, MySQL, MariaDB, SQL, NoSQL.

Oracle, Hyderabad, INDIA

May 2017 – Aug 2017

Software Development Engineer Intern

- Designed a pipeline to migrate source code repositories to a new server.
- Developed benchmarking metrics for the time taken to migrate the repository of different sizes using tools like BFG Repo-Cleaner and git-filter-branch.
- **Technology Stack:** Ruby, bash script, Git tools, BFG Repo-cleaner

Orvito, Hyderabad, INDIA

May 2016 – Aug 2016

Software Engineer Intern

- Developed usage-based water billing software that automates bill for cycles without human intervention by creating Web APIs using PHP
- Designed and maintained data mapping to support the implementation of operational data stores.
- **Technology Stack:** PHP, Slim Framework, MySQL, jQuery

Projects

Student Survey Portal

May 2020

- Created an MVC - based web application using RequestDispatcher object, which collects and processes the information of prospective students
- Enhanced the functionality of the portal by adding business delegate classes, cookies, validation, and event handling.
- **Technology Stack:** JAVA, Java Server Faces framework, HTML, CSS, JavaScript, Ajax, jQuery.

Chat Application

Dec 2019

- Created a real-time, bidirectional, and event-based communication for users to chat one-one and in groups.
- The application works by integrating sockets with the MEAN stack storing the chats in MongoDB.
- **Technology Stack:** Angular.js, Node.js, MongoDB, Express, Socket.io

Facial Emotion Recognition

May 2019

- Created a Mini-Xception Model with unique CNN architecture by employing the combination of depth-wise separable convolutions and residual modules, which improved the model's accuracy on the FER-2013 dataset from 66.43% to 71.21%.
- **Technology Stack:** Python 3, pandas, OpenCV, Tensorflow, NumPy, keras, scikit-learn, imutils, dlib, matplotlib

Recommender System

Dec 2018

- Designed and implemented a Recommender system on MovieLens dataset (IMDB), using Spark, to predict the rating of movies based on the utility matrix.
- Have utilized Product of Factors techniques, which improved the model's accuracy from 76.34% to 84.2%.
- **Technology Stack:** Pyspark, sklearn, scipy, NumPy, wordcloud, seaborn, kears, h5py

Smart Playlist Generation

Dec 2018

- Lead a team of 4 to develop a Personalized Playlist based on the user's playlist using the Million Song Dataset.
- The model recommends the playlist utilizing techniques of the Content-Based Recommendation System and Collaborative-Based Recommendation System.
- **Technology Stack:** Python3, pandas, NumPy, Tableau, nltk

AWARDS AND ACHIEVEMENTS

- Received "Outstanding Academic Achievement Award" from Volgenau School of Engineering, George Mason University for my academic performance during my MS in Computer Science.
- Bestowed with a scholarship of \$9000 during my graduate studies at George Mason University.
- Received a scholarship of \$5000 during my under-graduate studies at Mahindra École Centrale.