

## EDUCATION

**State University of New York, Buffalo, NY**

Expected Graduation : Dec 2020

Master of Science in Computer science

Relevant courses taken : Algorithms, Information retrieval, Machine learning, Object-oriented design and analysis.

**Kumaraguru college of Technology, Coimbatore, Tamil Nadu, India.**

Bachelors in Computer Science and Engineering

Relevant courses taken : Data structures, Algorithms, Object oriented programming, Computer architecture, Operating systems, Computer networks, Image processing.

## TECHNICAL SKILLS

**Programming languages :** Java, JavaScript, Python, C++.

**Operating systems :** Windows, MacOS, Linux(Ubuntu).

**Web technologies :** Html5, Css3, JQuery, React, Redux, GraphQL.

**Back-end technologies :** Spring, Springboot, Hibernate, Solr, Redis, Elastic Search, Memcached, nodeJs, expressJs.

**Machine learning frameworks :** Jupyter notebook, TensorFlow, PyTorch.

**Database :** MySQL, MongoDB, PostgreSQL.

**Data Visualisation tools :** Tableau, D3.js, Infogram.

**Big Data tools :** Hive, Hbase, Spark, Hadoop.

**Build tools and CI/CD :** Maven, Jenkins, Ant, Gradle.

**Hosting and other tools :** AWS, Heroku, Git, Visual studio, Jira.

## WORK EXPERIENCE

**Skava Systems, Coimbatore, India**

**Software development Engineer – (36 months)**

- Developed restful microservices using Spring framework to perform user authentication using OAuth2, session management using JWT, encryption and storage of user information into Apache Solr and MySQL database.
- Designed and developed an automated report system which periodically generates site usage statistical reports from AWS Cloud Watch logs and mails them to the production support team. This project significantly reduced the manual effort of constantly monitoring logs for server malfunctions thereby increasing team's productivity.
- Developed an automated migration tool that fetched around 2 million encrypted user information from a MySQL database and indexed them into Apache Solr. The user search API calls were restructured to fetch information from Solr server instead of the MySQL database which led to an 80% increase in user search speed.
- Integrated Memcached into existing microservices to provide an intermediate caching layer which significantly reduced the frequent database hits and inturn significantly reduced the server response time.

**Student intern – (6 months)**

- Developed responsive eCommerce websites using React, Redux and GraphQL that supported a multitude of devices ranging from mobile to in-store kiosks.
- Integrated Google analytics to the website to analyze the traffic flow and site usage metrics in realtime.
- Designed and developed custom jQuery plugins which were extendable, customizable as per business needs, and replaced the feature bloated 3rd party plugins thereby decreasing page load time.
- Worked along with the UX design team to design websites for fortune 500 companies taking into consideration user experience design principles & providing ease of usability, keeping in mind the unique design aesthetics of each brand.

## ACADEMIC PROJECTS

• **IR search engine** – [React, Solr, Aws, Spring] – Designed and developed a complete end to end IR system to provide best search result on data collected from twitter. Data were indexed in Apache Solr. React framework was used for building the search engine and the project was hosted on AWS. Topic categorization, visualization, data analytics, and sentiment analysis were performed on the data to understand the impact of political rhetoric on social media.

• **Q-Learning pathfinding** – [TensorFlow, Python] – This project implements a reward-based reinforcement learning technique (Q-Learning) on a 4X4 grid world environment. The object learns to find the shortest path from start to destination.

• **Breast Cancer Detection** – [TensorFlow, Python] – This project implements a supervised learning technique (Logistic regression) to predict if a patient has breast cancer or not based on the fine needle aspirate (FNA) of a breast mass.