

EDUCATION:

Indiana University – Bloomington, IN
Master of Science in Computer Science

May 2021
CGPA: 3.8/4

Relevant Coursework: Distributed systems, Applied Algorithms, Applied Machine Learning, Computer Vision

University of Pune, India
Bachelor of Computer Engineering

June 2017
First Class with distinction

TECHNICAL SKILLS:

Programming Languages: Python, Java, Node.js, C++, JavaScript, HTML, CSS, PHP

Web Services: AWS, Jenkins, Kafka, RabbitMQ, Kubernetes, docker

Tools, frameworks & libraries: Maven, Git, OpenCV, Redis, Ansible, Angular, Express, SQL, NoSQL.

Other: REST, CI/CD, Networks, Object-oriented programming

PROFESSIONAL EXPERIENCE:

Software Engineer | Accenture Solutions Pvt. Ltd

September 2017 – July 2019

- Spearheaded the agile automation of an efficient **REST** service using **Node.js** to handle IP flips for set-top boxes, improving the configuration process efficiency by **10x** (received a **client appreciation** award for the project).
- Developed a **Full-Stack web application** using **Angular** and **Node.js** for querying test data from Couchbase that reduced data retrieval time to **less than 2 seconds**.
- Developed an **Optical character recognition (OCR)** service to identify set-top box errors using **Python & OpenCV** that **reduced debugging time to less than a minute**, received the **runner-up award** for The Most Radical Idea of The Year at Accenture.
- Built a **Dynamic Chatbot web application** using **Angular** and **Node.js** used as a query-based search engine that saved developer's time spent on repetitive knowledge delivery.

Engineering Intern | Atreya Innovations Pvt. Ltd

July 2016 – April 2017

Analysis of the effect of Yoga on wrist pulse signals

- Developed a data pipeline to collect and process signal data in **MATLAB**.
- Implemented a Classification model in **MATLAB** to study the impact of yoga as a stimulus on wrist pulse waves, used as a pilot to analyze disease-specific patterns through this technique.
- Co-authored & presented research papers for this project published in "IEEE Xplore" and "Springer Professional".

Software Engineering Intern | Cytel Pvt. Ltd

June 2016

- Developed a windows application to automate testing of computational engines using **C++ (STL)** and **DLL's**.
- Significantly reduced the testing time of the computational engines by automating the complete process.

PROJECTS:

RainCheck – A weather forecasting Distributed System

January-May 2020

Technology stack: Java Spring, Node.js, React, Python, Docker, Kubernetes

- Designed and developed scalable **microservice** architecture for processing Nexrad radar data to compute precipitation graphs.
- Implemented a **CI/CD** pipeline for **containerized** services in a **Kubernetes** cluster deployed on **OpenStack** cloud using **Jenkins**.
- Integrated the system with **Istio service mesh** with **Grafana** and **Kiali** dashboards.

A/B Testing web application

April 2020

- Requests are evenly distributed between two versions of a webpage in A/B testing style.
- A user will randomly get either of the 2 versions of a webpage and will keep getting the same webpage unless cookies are destroyed.

FindTheHorizon

December 2019

- A Computer Vision utility that finds and paints the horizon in each image using Baye's nets and the Viterbi algorithm.

Neural Network from Scratch

November 2019

- Predicted the class of object in the image out of 10 classes for the Fashion MNIST dataset with a testing accuracy of 84%.
- Used RMSprop for optimization and Softmax activation function for the output layer.

Business optimization with Yelp reviews

August-December 2019

- Implemented Topic Modelling using Latent Dirichlet Allocation (LDA), to find general complaints and negative feedback given by customers for restaurants, obtained from sentiment analysis.
- Grouped segments of restaurants based on cuisine, customer sentiment, user check-in patterns, pricing, and other attributes to identify competitors using Hierarchical Clustering (Agglomerative).
- Recommended popular items/dishes in a restaurant that customers like using Named Entity Recognition.