SUMANT GAOPANDE

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EDUCATION

Master of Science in Computer ScienceIndiana University – BloomingtonCGPA: 3.8/4May 2021Bachelor of Computer EngineeringUniversity of Pune, IndiaFirst Class (distinction)June 2017

SKILLS

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

Cloud: REST, Kubernetes, Distributed Systems, AWS (S3, EC2), Jenkins, Kafka, RabbitMQ, Docker, CI/CD

Other: MongoDB, Git, Maven, Redis, Object-oriented software design, MySQL, NoSQL, Data Structures & Algorithms

WORK EXPERIENCE

Teaching Assistant | Indiana University - Bloomington

August 2020 – Present

• Grading & formulating Python coding assignments for CSCI – B 551 Elements of Artificial Intelligence.

Software Engineer | Accenture Solutions Pvt. Ltd

September 2017 – July 2019

- Developed a **REST** service in Node.js to handle IP flips in set-top boxes **reducing** configuration time by 95%.
- Developed a **Full-Stack** web application using Angular and Node.js for querying test data from Couchbase streamlining content retrieval.
- Developed an Optical character recognition (OCR) service to identify set-top box errors using Python (OpenCV), **reducing** debug time to less than a minute.
- Built a Chatbot search engine in Angular, Python & Node.js that **saved** time spent by teams on repetitive knowledge transfer.

Engineering Intern | Atreya Innovations Pvt. Ltd

July 2016 – April 2017

- Developed a **data pipeline** to collect, process and analyze signal data in MATLAB.
- Implemented Neural Net and SVM **classification** models to study the impact of yoga as a stimulus on wrist pulse signals.

Software Engineering Intern | Cytel Pvt. Ltd

June 2016

- Developed a windows application in C++ to automate the testing of computational engines.
- **Significantly reduced** testing time of computational engines and **streamlined** the process.

PROJECTS

Leader Election in Kubernetes Python client – Open Source contribution

June 2020

Developed a module for multi-threaded Leader Election in a Distributed Architecture using object locks.

RainCheck (Java – Spring Boot, Node.js, React, Python, Docker, Redis)

January 2020 – May 2020

A weather forecasting Distributed System

- Designed & built scalable containerized microservices to compute precipitation graphs from Nexrad radar data.
- Implemented Continuous integration & deployment for the services in a Kubernetes cluster using Jenkins.

FindTheHorizon (Python)

December 2019

• Developed a Computer Vision utility that finds and paints the horizon in an image using Baye's nets and the Viterbi algorithm.

A/B Testing web application (JavaScript, Cloudflare worker API)

April 2020

- Developed an A/B testing web application where requests are evenly distributed between 2 versions of a webpage.
- A user will randomly get either of the 2 versions and keep getting the same webpage unless cookies are deleted.

Business optimization with Yelp reviews (Python)

August 2019 - Dec 2019

- Identified negative topics from customer feedback for restaurants using Topic Modelling (Latent Dirichlet Allocation).
- Identified competitors by clustering (Hierarchical) restaurants based on cuisine, sentiment, check-in patterns, etc.
- Recommended popular items/dishes in a restaurant that customers like using Named Entity Recognition.

ACHIEVEMENTS

- Open Source contribution to the official Kubernetes Python client (Review in progress).
- Client appreciation award for building a REST service to handle IP flips in set-top boxes.
- Runner up for 'The Most Radical Idea of The Year' at Accenture (British Telecom Da Vinci).