Prathit Shukla

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EDUCATION

UNIVERSITY OF MICHIGAN – ANN ARBOR   **Sept 2018 - Dec 2021**
Bachelor of Computer Science (Dean's List) | Minor in Business   **GPA: 3.79/4.00**

Coursework: Data Structures and Algorithms, Software Engineering, Deep Learning, Operating Systems, Web Systems, Machine Learning, Computer Security, Computer Architecture, Business Operations, Marketing
Clubs/Teams: Michigan Autonomous Aerial Vehicles, Bursley Multicultural Council, IEEE, Science Olympiad

SKILLS

Programming: C++, C, Python, Flask, PyTorch, JavaScript, React, R,React-Native, MATLAB, Go, SQL
Tools: Git, Visual Studio, Linux, Jenkins, AWS, Bash, Vim, Agile, Jira

WORK EXPERIENCE

CAPITAL ONE FINANCIAL – Software Development Intern   **Jun - Aug 2020**
Skills: AWS, Python, Jenkins, CI/CD, Acceptance Testing, Git, Jira
- Migrated numerous applications to Jenkins using Pipeline-as-Code method to automate production builds, decreasing the release time from days to hours
- Streamlined future application migration by creating a Python script that generates a Jenkinsfile based on the repository pattern saving days of developer time

TECHLAB AT MCITY, INNOVIZ – Software Development Intern   **Jan - Dec 2020**
Skills: Python, Rest APIs, Serialization, ROS, Linux
- Implemented a smart traffic controller that uses Innoviz LiDAR to automatically detect pedestrian behavior and control traffic infrastructure to improve intersection safety
- Successfully integrated LiDAR hardware with Seoul Robotics perception software and used the MCity infrastructure API to simulate real time data transfer from intersections

XOPS, INC – Software Development Intern   **Jun - Aug 2019**
Skills: JavaScript, React, Git, Node.js
- Developed front-end functionality using React, allowing clients to export their application performance metrics in xSUM, a website/product performance tool
- Documented and solved issues with setup and compatibility of the development environment across different systems, decreasing the setup time for software teams and new users

PROJECTS

SPOTIFY DAILY
Skills: Python, Web Scraping, Beautiful Soup, Rest APIs, Flask
- Scraped daily Top 50 Songs charts along with each song's audio features from Spotify and lyrics from Genius to gain insightful analytics and changes in listening patterns
- Currently working to implement a web application to display daily analytics along with historical data in a dashboard similar to Spotify's End of Year Wrapped

MAP REDUCE SEARCH ENGINE
Skills: Python, Multi-Threading, TCP/UDP, Sockets, Flask, Rest APIs, AWS
- Built a custom MapReduce framework with TCP/UDP sockets to distribute tasks to workers and implemented fault tolerance with heartbeats
- Utilized a custom MapReduce pipeline to create an inverted index to evaluate PageRank of Wikipedia articles and hosted the web application and Rest API on AWS EC2

NBA PLAYER IMPACT: AN ML APPROACH
Skills: R, Data Mining
- Benchmarked the effectiveness of tree-based models, SVM, shrinkage, and KNN in R to rank NBA player's annual output based on dimensionally reduced player/team statistics
- Predicted season awards, such as Most Valuable Player, based on our ranking and discovered certain biases from the media's award selections