Rachit Rathi

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EDUCATION

University of Florida, Gainesville, United States   *Aug 2021 - Dec 2022*
Master of Science in Computer Science   ***GPA: 3.77/4.0***
Relevant Courses: Analysis of Algorithms, Distributed Systems, Applied Machine Learning, Software Engineering

Sardar Patel Institute of Technology, University of Mumbai, India   *Aug 2016 - May 2020*
Bachelor of Engineering in Electronics and Telecommunication   ***CGPA: 8.78/10.0***

WORK EXPERIENCE

StanleyBlack&Decker - [AWS SAM, GraphQL, Lambda, DynamoDB]   *Jun 2022 - Present*
Software Engineering Intern – Digital Innovation   *Gainesville, Florida*
- Assigned to work on Backend service (Oxygen) which is central platform for data and device integration for lawn mowers.
- Currently working on serverless model to create automated data ingestion pipeline from cumulocity using Kinesis streams.

Capgemini - [.NET Core, C#, HTML, AJAX, JavaScript, MS-SQL, Agile Development]   *Sept 2020 - Jun 2021*
Software Engineer – Sogeti Division   *Bangalore, India*
- Developed end-to-end pipeline to register and evaluate certification applications catering to 5000+ internal employees.
- Created role-based views for SPOC, Admin and User to process and approve applications in portal and generated history logs.
- Triggered automated mail notifications using console application to employees at each step during certification process.

J.P Morgan Chase & Co. - [MS-Office, VBA]   *Feb 2020 - Jul 2020*
Analyst Intern – Centralized Research Group   *Mumbai, India*
- Advised foreign clients on Mergers and Acquisitions in the Industrials and Transportations sector by creating pitchbooks.
- Used Visual Basic and terminals such as FactSet, Bloomberg, and Eikon to perform research and analysis on financial data.

PROJECTS

Gator Marketplace (*Master's Project*) - [Golang, React, MongoDB, Go Testing]
- Implemented Full Stack decoupled web application using SDLC for University of Florida student community to buy/sell products.
- Worked on OAuth2.0, API development, and Payment Gateway Integration using Stripe. Used CI/CD and deployed to Heroku.

Twitter Engine (*Master's Project*) - [F#, JavaScript, HTML, CSS]
- Built Twitter Engine with Web Interface and implemented tweeting, retweeting, hashtags, mentions using Suave.IO.
- Simulated 100000+ clients with independent processes using single engine and generated Zipf distribution on subscribers.

Bitcoin Miner (*Master's Project*) - [F#, Akka.NET]
- Developed Bitcoin Miner capable of running on distributed systems through client server architecture using Actor Model.
- Used SHA-256 hashing to find coins up to 12 leading 0's with CPU to Real Time ratio of 2.7, thus achieving high parallelism.

University Connect (*Startup Initiative*) - [Node.js, React, Redux, Mocha, Express.js, NoSQL, AWS, Google Analytics]
- Contributed to creating website for collaboration of students, teachers, and alumni with handling capacity of 10000+ users.
- Developed forms, Q&A forum, user profiles and in-house chat feature. Performed path-based analytics to track page visits.
- Created RESTful APIs and scripted unit test cases, also secured and hosted website on AWS using EC2 instances.

Driver Fatigue and Distraction Analysis using Machine Learning (*Final Bachelor's Project*) - [Python, OpenCV, TensorFlow]
- Analyzed and predicted current state of driver using K-Nearest Neighbor Algorithm by monitoring eyelid blinking and yawning.
- Predicted activities such as texting, drinking, speaking and others with optimized accuracy of 97% using CNN (VGG16)

TECHNICAL SKILLS

Programming Languages: Java, JavaScript (ES6), C#, Python, Golang, HTML, CSS, SQL, F#, Ladder Logic
Web and Databases: React, Node.js, Express, ASP.NET Core MVC, AWS EC2, MongoDB, MS-SQL, REST
Frameworks and Tools: OpenCV, TensorFlow, Visual Studio, Mocha, TDD, Google Analytics, Git, Raspberry-Pi, MS-Office
Certifications and Trainings: Linux Administration, Firebase, Internet of Things, Industrial Automation

PUBLICATIONS AND INVOLVEMENTS

- Published paper in IEEE titled "Implementation of Virtual OPC on Cloud" at TENCON 2019 (*ISBN: 978-1-7281-1895-6*).
- Published paper in Springer on bachelor's project at ICICC 2020 (*ISBN: 978-981-15-5113-0*)
- Led team of four members at Mitsubishi Electric Cup 2019 and secured 2nd Appreciation Prize nationally.
- Volunteered as Teaching Assistant from 2017-2019 at Abhyudaya SPJIMR, that caters to underprivileged children.