Sohan Patil

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**EDUCATION** 

Stony Brook University (SUNY SB)

M.S. in Computer Science Courses: Distributed Systems, Analysis of Algorithms, Data Science, Human Computer Interaction

Stony Brook, New York Aug 2019 - Expected Dec 2020

Government College of Engineering (GECA)

B.E. in Computer Science and Engineering; GPA: 8.345/10 (Top 10% in a class of 72)

Aurangabad, India July 2013 - June 2017

#### SKILLS

- Languages: Proficient Java, C, Typescript, Go, HTML / CSS. Prior Experience C#, Python, PHP, SQL, Shell, JavaScript
- Tools and Frameworks: Angular, Spring Framework, Android, Docker, Java Message Service, MapReduce, GIT, JIRA, Matlab, Pandas, Matplotlib, scikit-learn, JSP, ASP .Net, OpenMP, CUDA, TDD, JUnit

## Work Experience

# Principal Financial Group (PFG)

Pune, India

Software Development Analyst

July 2017 - August 2019

- o Involved in the development of an in-house OCR Document and Data Capture web tool as a replacement to IBM's DataCap, potentially saving \$500,000 per year in licensing costs
- Saved a total of 150 working hours every 2-week sprint by implementing a Mulesoft based solution to synchronize Salesforce cloud DB with on-premise DB2 LUW database
- Improved team efficiency by 15% as a consequence of automating the workflow of three tasks around Branch Cleanup and Fortify scan reporting, using Selenium API + shell scripting
- Improved CI/CD pipeline and slashed go-live time by 30% by integrating code analyzer tools like SONAR and HP Fortify with Bamboo build plans
- o Implemented fine-grained access control to secure data views of ODS, an enterprise-wide MDM tool
- Used Google Web Speech API and rule-based ML to enable management of JIRA tickets through voice
- Revamped a legacy Individual/Group Insurance Policy Management web-app using Angular 5 and Bootstrap which increased agents' ease of data access. Secured REST API endpoints with OAuth2
- o Trained six interns on domain knowledge as well as Agile practices, Git, Angular and Bootstrap Framework

### KEY PROJECTS

- Replicated State Machine: Building an RSM in Go that would use Raft algorithm for consensus (Sept '19 Present)
- Distributed MapReduce: Implemented a fault-tolerant MapReduce scheduler in Go (SUNY SB, Aug '19)
- Transaction Fraud Detection: Used Logistic Regression to classify customer transactions as Fraud/Non Fraud, reaching 84.5% accuracy. Used SMOTE technique to reduce bias due to skewed data (Sept '19)
- Spoiler Blocker Chrome Plugin: Leveraged TMDb API to block (blur-out) posts on Facebook filled with movie spoilers (April '19)
- Simple DB: Implemented a basic clone of SQLite which uses B Tree and B+ Tree as Index and Page file nodes (Jan '19)
- Remote File Security System: Used inter-platform IPC to encrypt/decrypt and manage user's files on a shared computer via an Android app (GECA, 2016-17)
- Coding Contest Platform: Developed a LAMP-stack based programming contest platform that was able to handle 500+ users simultaneously (GECA, 2016)

## Achievements & Extracurricular

- All Staff Award by PFG Pune for efficiently managing the dual role of a Developer & Business Analyst (March '19)
- Rising Star Award by PFG Pune for delivering 2.2x of expected in Q3 & Q4 of 2017, amid 500+ employees (May '18)
- Project Of The Year by PFG Pune; awarded a total cash prize of INR 55000 for 'Aatmanirbhar', a project that enabled 180+ deserving underprivileged graduates with IT jobs (Nov '18)
- Winner of SEED Maha IT Idol(news link), a state level coding contest against 75000+ competitors (April '16)
- Finalist in TCS Testimony, a national level 'quality assurance automation' contest in a pool of 85,000+ others (July '16)
- Winner of CodeKing (2015), a state level coding competition by DIEMS, Aurangabad against 3000+ entrants (Oct '15)
- Finalist in 'Manifest', a website development hackathon organized by IIT, Bombay (Jan '15)