Sohan Patil

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# **EDUCATION**

### Stony Brook University

New York, NY

M.S. in Computer Science Courses: Distributed Systems, Analysis of Algorithms, Data Science, Human Computer Interaction Aug 2019 - Expected Dec 2020

### Government College of Engineering

B.E. in Computer Science and Engineering; GPA: 8.345/10 - (Top 10% in class of 72) Worked as Honorary Technical Secretary of the Department

Aurangabad, India July 2013 - June 2017

### SKILLS SUMMARY

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

#### Industry Experience

## Principal (offices at Pune)

Pune, India

 $Software\ Development\ Analyst$ 

July 2017 - August 2019

- Involved in development of an in-house OCR Document and Data Capture tool as a replacement to IBM's DataCap, potentially saving \$500,000 per year in licensing costs
- Revamped Individual/Group Insurance Policy web-app using Angular 5 and Bootstrap. Provided dashboard view to help agents track their data. Secured REST API endpoints by integrating OAuth2 security framework
- Improved CI/CD pipeline and reduced go-live time upto 30% by integrating code analyzer tools like SONAR and HP Fortify with Bamboo build plans. Wrote JUnits and followed Test Driven Development approach attaining 100% code coverage in some modules
- Saved a total of 150 man 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% by automating Git branch cleanup task using Selenium API + shell scripting
- o Implemented fine grained access control to secure data views of the enterprise wide MDM tool
- Used Google Web Speech API and rule-based ML to enable management of JIRA tickets through voice
- o Trained 6 interns on domain knowledge as well as Agile practices, Git, Angular and Bootstrap Framework

### KEY PROJECTS

- Replicated State Machine: Golang implementation of a replicated state machine protocol (Raft). Building a 'shard'ed key-value service on top of Raft for higher performance
- Distributed MapReduce: Implemented a fault tolerant MapReduce scheduler in Go programming language
- Spoiler Blocker Chrome Plugin: Leveraged TMDb API to block (blur-out) posts on Facebook filled with movie spoilers
- Simple DB: Implemented a rudimentary clone of SQLite which uses B Tree and B+ Tree as Index and Page file nodes
- Live Twitter Sentiment Analysis: Experimented with NLTK, Tweepy and Pandas to provide a dynamic DASH graph that displays tweeps' sentiment against input keywords. Compared VADER and TextBlob approach reaching 83% accuracy
- Remote File Security System: Used RPC to encrypt/decrypt user's files on a shared computer by way of an Android app
- Coding Contest Platform: Developed a Django based programming contest platform able to handle 500+ simultaneous users

### ACHIEVEMENTS & EXTRACURRICULAR

- All Staff Award (2019) for topping quality expectations in a dual role of a Developer & Business Analyst
- Rising Star Award (2018) for delivering 2.2x of expected in Q3 & Q4 of 2017 from a pool of 500+ employees
- Project Of The Year (2018) awarded total cash prize of INR 55000 for 'Aatmanirbhar', a project that enabled 180+ underprivileged graduates with IT jobs
- Winner of SEED Maha IT Idol (2016), a state level coding contest against 75000+ competitors
- Finalist in TCS Testimony (2016), a national level code quality assurance competition in a pool of 1,00,000+ others
- Winner in CodeKing (2015), a state level coding competition against 3000+ entrants
- Finalist in 'Manifest' @TechFest 2015, a website development hackathon by Indian Institute of Technology, Bombay