Sohan Patil

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EDUCATION

- **Stony Brook University (SUNY SB)** — Stony Brook, New York
  M.S. in Computer Science; GPA: 3.67 — *Aug 2019 - Present*
  Courses: Distributed Systems, Analysis of Algorithms, Data Science, Human Computer Interaction,

- **Government College of Engineering (GECA)** — Aurangabad, India
  B.E. in Computer Science and Engineering; GPA: 8.345/10 — *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 - Aug 2019*
  - Involved in the development of an in-house OCR Document and Data Capture web tool, as a replacement to IBM's DataCap using Java + Angular stack, 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 Java 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
  - 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
  - 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 (Fall '19)
- **Slide to Type**: Built a multi-channel sokgraph detection tool using SHARK^2 algorithm to implement a clone of SwiftKey keyboard (Fall '19)
- **Distributed MapReduce**: Implemented a fault-tolerant MapReduce scheduler in Go (Fall '19)
- **Transaction Fraud Detection:** Leveraged Logistic Regression to classify customer transactions as Fraud/Non Fraud, reaching 84.5% accuracy. Used SMOTE technique to reduce bias due to skewed data (Fall '19)
- **Spoiler Blocker Chrome Plugin**: Used TMDb API to 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, Fall '16)

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)