Samarth Tambad

GitHub | Portfolio | LinkedIn

Jersey City, NJ 07310
mobile: 9514752853
samarth.tambad@nyu.edu

EDUCATION

New York University, NY, NY **Jan 2021 (expected)**
Master of Science, Computer Science *GPA: 3.76/4.0*
Relevant Coursework: Distributed Systems, Fundamental Algorithms, Operating Systems, Database Systems, Programming Languages, Machine Learning, Computer Vision, Intro to Blockchain

Ramaiah Institute of Technology, Bangalore, India **May 2014**
Bachelor of Engineering, Electronics and Communication *GPA: 8.95/10*
Relevant Coursework: Data Structures, Computer Communication Networks

TECHNICAL SKILLS

Programming Languages: Python, Go, C++, JavaScript, Scala, Java
Databases: MySQL, MongoDB
Tools & Frameworks: Hyperledger Fabric, Spark, Bash, Git, Node.js, Docker

PROJECTS

LeetCode Timer (Chrome Extension) - *[JavaScript, Vue.js], (repo, chrome web store)* **Personal Project**
- Identified the need by collecting user feedback, designed and built the app, published on chrome web store for easy access

Distributed Key-value Store, Raft, View-stamp Replication - *[Go, Bash]*, (repo) ***Distributed Systems***
- Implemented Raft and View-stamp Replication consensus algorithms to maintain a replicated log in multiple servers
- Built a fault-tolerant key-value store (using my Raft implementation) capable of handling concurrent client requests

Blockchain for Law Enforcement - *[Hyperledger Fabric, Go, JavaScript, NodeJS, Vue.js, Bash]*, (repo) ***Intro to Blockchain***
- Implemented code to launch a permissioned blockchain network with judiciary and law-enforcement organisations
- Created end-to-end application with user interface, middleware APIs and a blockchain network storing immutable data records

Analysing programming languages by community characteristics on GitHub and StackOverflow
- *[Scala, Spark, Tableau]*, (repo, paper) ***Big Data***
- Implemented code to clean and transform huge datasets of GitHub and StackOverflow into relevant metrics
- Visualized metrics using Tableau, performed analysis on metrics to derive insights, published a paper describing the process

MiniDB - *[Python, NumPy, pytest, GitHub Actions], (repo)* ***Database Systems***
- Created a miniature database with order that performs operations on tables such as create, select, join, index, etc
- Reduced development time, increased development efficiency and minimized possibility of bugs by voluntarily investing time to write unit tests and set up automated testing pipeline using Github Actions
- Increased readability and improved efficiency by advocating for object-oriented design and enforcing peer review

IPL Data Analysis and Visualisation Dashboard - *[Python, Pandas, Vue.js], (demo, repo)* **Personal Project**
- Performed analysis on Kaggle IPL dataset, extracted compelling insights, designed user interface for visualisation

WORK EXPERIENCE

Software Engineer **Moonraft Innovation Labs** ***Jun 2014 - Sep 2017***
- Facilitated on-time completion despite impossibly close deadline and team member's health issue by volunteering to undertake complete ownership of enabling the team to focus on the rest
- Implemented, tested and installed interactive installations at Experience Centres for various client companies
- **Projects:**
  1. **Social Command Centre -** *[JavaScript, D3.js, socket.io, HTML, CSS], (watch video here)*
     - Served as a single point of contact for the client for 6 months
  2. **Vera -** *[Python, Scrapy, Arduino, MySQL, Jade, SASS, CoffeeScript, Node.js], (view website here)*
     - Integrated hook sensor into the prototype by writing methods to interface with RFID and stress sensors
     - Scraped data, created a database of clothing trends. Facilitated training of a recommendation engine
     - Developed user interface for the prototype with smooth transitions and socket communication
  3. **Virtual Dressing Room -** *[C#, Unity3D, JavaScript, Socket.io]*
     - Devised methods to translate movement and joint orientations recorded by Kinect onto a 3D model
     - Created gesture-based user interface to select clothing and view clothes draped virtually on the user