

# Jonathan Rufus Samuel

Software Engineer | Cloud Administration | Open-Source Advocate

## EXPERIENCE

### **HYPERFACE | SDE INTERN - BACKEND ENGINEERING**

January 2024 – Present | Bangalore, KA

- Developed an Employee Management System as part of training for Java Spring Boot Development. Worked on CRUD operations development, authentication and authorization, testing and migration to Apache Groovy.
- Handled Information Security issues with Bank Dashboards, including encryption of insecure data fields, fixing enumeration issues, recreating security breaches via Burpsuite, and addition of code to preserve security.
- Wrote scripts using Python to handle migration of over 1 million records from bank servers to company servers.

**Tools Used:** Java, Apache Groovy, Java Spring Boot, Spring Security, Apache Kafka, Gradle, Postman, MySQL, Python Scripting, Burpsuite.

### **RIVER BEND DATA SOLUTIONS | JUNIOR SOFTWARE ENGINEER**

May 2022 – Aug 2022 | Hyderabad(Remote)

- Developed 'iClinic', a cross-platform patient & hospital management system. Worked on React-Native, NodeJS, Express JS and MongoDB.
- Designed and developed fundamental business logic, including authentication handling, API design, Schema Design and basic DevOps administration.
- Improved App performance by 25% by utilising React Native best practices, including improved caching and Lazy Loading.
- Nominated as Junior TechLead for a period of 2 Months, tasked with junior team management, reporting of progress to senior team, handling of sprint meetings and assigning of work within Agile Development Setting.

## PROJECTS & OPEN-SOURCE WORK

### **DIJKSTRA | OPEN SOURCE DEVELOPER & MAINTAINER**

February 2023 – present | Bangalore | [github.com/Dijkstra-Edu](https://github.com/Dijkstra-Edu)

- Built a Full-Stack Educational App, along with an Admin panel for uploading posts on DSA preparatory work & Solutions of Leetcode and Hackerrank Problems, along with other information pertaining to Interview Preparation.
- Started a GitHub organization for the same, currently catering to 30 junior CS students. Currently in development and Testing, set for App Store release in 2024.
- Currently head Systems Administrator of Azure Cloud Services for Dijkstra.
- Successfully transitioned API infrastructure from Netlify to Azure Cloud. Containerized and scaled API services via Kubernetes (AKS) and Docker, thereby improving response times from 45s to 2s.

**Tools Used:** React Native JS, NodeJS, ExpressJS, MongoDB, HTML, CSS, Azure Cloud, Docker, Kubernetes (AKS), Lens, Netlify Cloud, Postman, Git and GitHub.

### **APPFLOWY | OPEN SOURCE SOFTWARE DEVELOPER**

March 2023 – present | Singapore (remote)

- Made a total of 6 Pull Requests addressing various bugs in the code base.
- Drafted 2 technical articles and 3 major documentation changes.
- Handled Unit Test cases for AppFlowy's flutter bloc editor, improved code coverage by 18%.

**Tools Used:** Flutter, Dart, Rust, Codecov, Postman

### **AUTOMATED MP3 TAG EDITOR VIA DATA MINING**

Github: [github.com/Mp3-Automated-Tag-Editor](https://github.com/Mp3-Automated-Tag-Editor)

- Worked with **Shivansh Sahai** and **Dr. Swarnlatha P** to create **Automated Mp3 Tag Editor**, a tool which scrapes metadata of music tracks from various sources, and classifies them via a Vector Indexing Machine Learning Algorithm.
- Built API server using FastAPI and Python, and built out a Desktop Application using React.js, Tauri, Rust and JavaScript. Deployed via Azure.

**DOI:** 10.4018/978-1-6684-8098-4.ch012

**Tools Used:** Rust, Python, FastApi, React, Tauri, Postman, Azure, Docker, Sqlite, ShadCN UI.

## EDUCATION

### **VELLORE INSTITUTE OF TECHNOLOGY, VELLORE**

B.Tech Computer Science Engineering w/ Specialization in IoT

CGPA: **8.58**

2020-2024 | Vellore, India

### **BISHOP COTTON BOYS' SCHOOL**

2005-2020 | Bangalore, India

12th Boards: **93.5%** (ISC)

10th Boards: **91.2%** (ICSE)

## SKILLS

Programming

Java • Python • Javascript • TypeScript • Rust

• C++ • SQL (MySQL, PostgreSQL & SQLite3)

Frameworks & Technologies

React JS • React-Native • Spring Boot • Git &

GitHub • NodeJS & ExpressJS • MongoDB •

REST API Design • Docker • AKS - Kubernetes

• ElectronJs • FastAPI • Tauri • Selenium • Jest

• Azure Cloud • AWS Cloud • Linux • Scrum &

Agile Methods • DevOps • Systems Design

## ACHIEVEMENTS

- Completed **Microsoft Azure Administrator Associate (AZ-104) & Azure Fundamentals (AZ-900)** Certification offered by **Microsoft**.

- Currently an **Alpha Level Student Learn Ambassador** at **Microsoft**.

- Open Source Contributor at **AppFlowy**, **CERN Root**, **Dijkstra**, **Apprentice** and **YAFS**.

- Over **1400 contributions** on GitHub, top 4.4% for repositories contributed to (66).

- Systems Design and Algorithm Design

Certified by **AlgoExpert**.

- Mathematics for Machine Learning

Specialization offered by **Imperial College**

**London** & Completed Accelerated Computer

Science Fundamentals Specialization offered by

**University of Illinois (GoldmanSachs ECHP-23 Program)**

- **Top 3%** of Leetcode by Problems Solved

- **5 star** Problem Solving in Hackerrank

- Senior Core Member at **IEEE-TEMS**, Mentor to 30 Junior students.

## LINKS

Github: <https://github.com/JRS296>

LinkedIn: <https://linkedin.com/in/jrs2002/>

Website: <https://jrs296.github.io/JRS-Studios/>

LeetCode: <https://leetcode.com/JRS296/>

Hackerrank: <https://hackerrank.com/JRS296>

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