Atreya Bain

atreyabain@gmail.com | 0 7467 366 155 | kekvrose.me | linkedin.com/in/atreyabn | github.com/chrisvrose

Overview

Software Engineer with experience in secure large-scale systems, automation, and programming languages. Highly passionate about building innovative, scalable and secure software solutions with a keen eye for detail and usability.

Education

University College London, M.S. - Software Systems Engineering — 2024 - Present
- Relevant coursework: Requirements Engineering and Software Architecture, Computer Security, Malware

R. V. College of Engineering, B.Tech - Computer Science & Engineering — 2018 - 2022
- GPA: 9.07/10

Experience

Postgraduate Teaching Assistant, University College London – London, UK — Jan 2025 - Present
- Valuation of coursework and examinations for module Compilers.

Software Engineer, Cisco Systems India Pvt. Ltd. – Bangalore, IN — Aug 2022 - Sep 2024
- Collaborated with team on application security for Cisco IOT Control Center (IoTCC), such Single Sign On support and user security policies.
- Collaborated with multiple teams on extraction and centralization of application secrets used by IoTCC applications in 20+ lab and production environments into enterprise Vault.
- Manage and debug deployment of Cloud Config Servers over 4+ on-prem and cloud environments.
- Managed Jenkins pipelines to automate synchronization of application secrets and SSL Certificates across IoTCC deployment environments, decreasing release deployment times by ~25%.
- Designed and implemented a captcha solution for sharded systems to mitigate unwanted bot activity.
- Formulated POCs and worked on implementation for oAuth 2.0 authorization server (K8S) microservice.

Software Engineering Intern, Cisco Systems India Pvt. Ltd. – Bangalore, IN — Feb 2022 - Jul 2022
- Developed a solution in collaboration with team for managing and externalizing SSL certificates for Cisco IoTCC, reducing creation of emergency releases by ~40%.
- Implemented git hooks to automatically collect impact ownership metadata of SSL Certificates to allow for quicker action in case of certificate expiry.

Software Engineering Intern, Lexis-Nexis Risk Solutions – Atlanta, US (Remote) — May 2021 - Aug 2021
- Extended HSQL to introduce Big-Query like procedures and strongly-typed variables.
- Added HSQL syntax to support graphing methods and machine learning models outside the standard library.
- Awarded the Community Choice Award in HPCC Systems Poster Competition 2021.

Backend Development Intern, Revagram – Bengaluru, IN — Sep 2019 - Nov 2019
- Developed RESTful APIs using MongoDB and Express.JS.

Projects

IEEE RVCE Student Chapter Website - github.com/IEEE-RVCE — Jul 2020 - Dec 2022
- Led the Back-end team for developing the IEEE RVCE Student chapter website, receiving 2 awards in the IEEE Student Branch Website Contest in 2021 - Winner at the Global Level and Runner up at R10 level.
- Led the web team from 2021, championing CI/CD and design reviews to cut iteration times by ~20%.
- Technology Used: Express.JS, PostgreSQL, Docker, React, Github Actions, Github Pages, Oracle Cloud.

HSQL - HPCC Structured Query Language - github.com/hpcc-systems/hsql — Jan 2020 - Jul 2020
- Built HSQL - enabling a familiar SQL-like interface for data analysis in HPCC Systems.
- Created a compiler and VSCode extension for supporting development in HPCC Systems clusters using HSQL.
- Tools Used: ANTLR, HPCC Systems, Webpack, Mocha.

Skills

Programming Languages: Java, Typescript/JavaScript, Python, C++, C, Rust, PHP
Frameworks: Spring Boot, Spring Cloud, React, Next.JS, Sencha EXT.js, HTML5
Databases: MySQL, PostgreSQL, Oracle DB, Redis, MongoDB
Technologies: Docker, Kubernetes, Hashicorp Vault, OCI, AWS, git, ANTLR