

Atreya Bain

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

Overview

Software Engineer with experience in securing distributed systems, automation, and programming languages. Passionate about building secure and scalable solutions with a keen eye for detail and usability.

Education

- University College London**, M.S. - Software Systems Engineering 2024 - Present
- Relevant modules: 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 – Bangalore, IN Aug 2022 - Sep 2024
- Collaborated with team on application security features for Cisco IOT Control Center (IoTCC), such Single Sign On support using SAML, user security policies.
 - Collaborated with cross-functional teams on extraction and centralization of application secrets used by IoTCC applications in 20+ lab and production environments into centralized Vault.
 - Manage deployments of Cloud Config Servers on 20+ on-prem and public cloud environments.
 - Automated synchronization of application secrets and SSL Certificates across multiple environments using Jenkins pipelines, reducing release deployment times by ~25%.
 - Led design and implementation of a CAPTCHA solution across shared environments to mitigate bot activity.
 - Formulated POCs and worked on implementation for OAuth 2.0 authorization server (K8S) microservice.
- Software Engineering Intern**, Cisco Systems – 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 syntax supporting 15+ graphing methods, user-created machine learning models and external ECL code.
 - Awarded the Community Choice Award in HPCC Systems Poster Competition 2021.
- Backend Development Intern**, Revagram – Bengaluru, IN Sep 2019 - Nov 2019
- Developed and tested RESTful APIs for learning materials management.

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/hsq 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: PostgreSQL, Oracle DB, Redis, MongoDB, MySQL
Technologies: Docker, Kubernetes, Hashicorp Vault, Oracle Cloud, AWS, git, ANTLR, Kestrel (MQ)