Vinesh Benny

Open Source Contributor — Full-Stack Developer

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SKILLS

Languages: Python, Java, JavaScript, TypeScript, C, Rust, Lua, SQL, HTML, CSS, bash
Frameworks/Databases: React, Node.js, Express.js, MongoDB, PostgreSQL, Firebase
Tools/Technologies: AWS, Docker, Bash, Git, Jira, Unix, Treesitter

EDUCATION

University of Toronto – Honors Bachelor of Science   Sep. 2020 – Apr. 2024

Major in Computer Science — *Specialization in Software Engineering Stream*   Toronto, Ontario

- **Teaching Assistant** – CSCA20, CSCB09
  Conducted weekly tutorial sessions with over **40** students going over concepts in **software engineering**, **Introduction to Programming** (**Python, Flask, matplotlib**) and **Systems Programming** (**C, bash/zsh**) while also assisting students with labs/assignments.
  Created solutions for past finals from 2015 – 2022 as a resource used by **100+** students in the course.
- **Awards:** University of Toronto Scholar, Fall 2021 Dean's List

WORK EXPERIENCE

Software Developer Co-op   Sep. 2022 – Dec. 2022

BlackBerry QNX — *C, Jira, Salesforce, OpenGrok, VMWare*   Mississauga, Ontario

- Enhanced real-time system stability by debugging the kernel of the **POSIX-compliant QNX operating system**, addressing critical issues related to **thread communication**, **synchronization**, and **process scheduling**.
- Improved customer satisfaction by actively participating in a customer-facing integration team, focusing on resolving complex kernel issues and ensuring high-quality software performance.
- Resolved **15+** technical issues through collaborative development and implementation of software patches, significantly improving system reliability and performance.

RELEVANT EXPERIENCE

⭘ Raycast Open Source Contribution — *React*   May 2024 – Jun. 2024

Popular MacOS launcher with over **5K** stars

- Developed a **Raycast** command to show rich episode information for TV shows and movies using **React** and **The Movie Database's** API, with over **1500** current users.
- Pull request reviewed and accepted by the **Raycast** team within **2** weeks.

⭘ ProtoBufs — *C, Protocol Buffers, OpenSSL*   Sep. 2023 – Dec. 2023

Library for secure communication using Protocol Buffers and OpenSSL

- Developed a **C** library to serialize and deserialize data using **Protocol Buffers** and **OpenSSL** for secure communication using asymmetric **RSA** encryption.
- Implemented a **client-server** model to demonstrate the library's functionality and performance.

⭘ Scholarly — *Next.js, Node.js, PostgreSQL, TypeScript, Docker, AWS Lightsail*   Jan. 2023 – Apr. 2023

Real-time online tutoring application powered by **WebRTC**

- Architectured real-time video chat using **WebRTC** for low-latency communication between students and tutors.
- Implemented a production-ready payment system with **Stripe**, following best practices for asynchronous payment processing with **webhooks**.
- Deployed the application using **Docker** and **Amazon Lightsail**, with **LetsEncrypt** TLS certificates.

⭘ Weast — *Python, SQLite, AWS, Papertail, OpenAI*   Jun. 2021 – Present

ChatGPT Discord bot with over **500 active users**

- Structured a robust WebAPI to store images on AWS S3 resulting in **10%** better time and space efficiency.
- Integrated a chatbot command using **OpenAI's ChatGPT API** for instant search and conversational queries resulting a **30%** increase in user interaction.
- Streamlined deployment by serving the project over an **AWS EC2** server using **Docker** containers and setup CI/CD using **GitHub Actions**, resulting in a seamless experience for users.