Naveen Raman Sivasankar

naveen.sivasankar1234@gmail.com • linkedin.com/in/nrs1 • github.com/naveenrs123 • https://naveenrs.me • 778-865-1811

Education

University of British Columbia **Vancouver, BC**
B.Sc. Honours in Computer Science *May 2022*
Coursework: Algorithms/Data Structures, Software Engineering, Databases, Distributed Systems, Networking

Work Experience

Copperleaf **Vancouver, BC**
Software Developer Co-op *May - Aug 2021*
- Wrote three, **500-line migration scripts** in Oracle PL/SQL to migrate existing data and simplify database schema.
- Implemented more than **10 features** to improve the user experience and facilitate system-wide architecture changes.

Software Engineer in Test Co-op *Sep 2020 - Apr 2021*
- Developed and tested full-stack software in an agile environment using **Angular**, **.NET Framework,** and **Oracle SQL**, used by customers with millions of dollars worth of assets.
- Fixed **80+ bugs** across the entire application resulting in faster page loads by **3 seconds**, reduced automation test suite failures, and increased customer satisfaction.
- Wrote **5 test plans** with over **30 test cases** each to comprehensively test new application features.

Trulioo **Vancouver, BC**
Junior Software Engineer Co-op *May - Aug 2019*
- Maintained and improved a full-stack product in an agile environment using **React.js**, and **.NET Framework.**
- Fixed **30+ front-end bugs** resulting in reduced instances of visual regression and positive customer feedback.
- Upgraded projects to **React 16.8** and **.NET Framework 4.8** in preparation for an upgrade to .NET Core.

Projects

ReferencesPlus (Honours Thesis Project) *Sep 2021 - Apr 2022*
- Developed a Chrome extension that captures web interactions and embeds them into GitHub PR discussions, allowing reviewers to comment on websites by making precise references to visual elements.
- Designed a system in which the Chrome extension (written in **TypeScript**) communicates via REST APIs with a backend server written in **Python** and **Flask**, which stores the data in a **MongoDB** database.
- Conducted a user study showing that the tool has a **15% reduction in workload** over the existing GitHub interface.

EphemeralRocket (Academic Project) *Jan - Apr 2022*
- Created a semi-permanent, distributed messaging system with fault tolerance, written in **Golang.**
- Supported messaging between multiple clients located on different machines, communicating via **RPC over TCP.**
- Handled server failures via a robust protocol that preserves message state and ensures reliable delivery.

Nanopass Compiler (Academic Project) *Jan - Apr 2022*
- Developed a compiler that compiles a small subset of **Racket** to **x64** via a **nanopass** approach.
- Supported variables, control flow and nesting to enable common functional programming behaviour.
- Implemented a dynamic type system using tagged representations of binary data.

MapBuilder DSL (Academic Project) *Sep - Oct 2021*
- Created a Domain Specific Language using **Java** and **ANTLR** to build maps for fantasy worlds.
- Supported functions and control flow logic to allow code reuse and create more complex maps.
- Enabled various forms of comparison to make conditional statements more powerful.

Personal Website *Apr 2021*
- Created a lightweight, responsive website using **HTML, CSS, JavaScript, and Bootstrap**.
- Added **CSS media queries** and JavaScript functions to adjust content for various screen sizes.
- Used **Bootstrap** to create collapsible sections, scrolling navigation and styled tooltips.

Skills

Languages/Frameworks: Java, HTML, CSS, TypeScript/JavaScript, C/C++, C#, Python, SQL, Angular, MongoDB, Bash
Tools/IDEs: IntelliJ IDEA, Jupyter Notebooks, Visual Studio, Visual Studio Code, Git, JIRA, BitBucket, Azure Devops, GitHub