**Naveen Raman Sivasankar**

[naveen.sivasankar1234@gmail.com](mailto:naveen.sivasankar1234@gmail.com) • [linkedin.com/in/nrs1](https://www.linkedin.com/in/nrs1/) • [github.com/naveenrs123](https://github.com/naveenrs123) • [https://naveenrs.me](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**](https://github.com/naveenrs123/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**](https://github.com/naveenrs123/EphemeralRocket) (Academic Project) *Jan - Apr 2022*

* Created a semi-permanent, distributed messaging systemwith 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**](https://nanopass.org/index.html) 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**](https://github.com/naveenrs123/MapBuilderDSL) (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**](https://naveenrs.me)*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