**Simon Chen** [Github Profile](https://github.com/chen-simon)

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**EDUCATION**

**University of Toronto, Honors BSc in Computer Science September 2020 - May 2025**

* **GPA:** 3.7; Co-op Computer Science Specialist, Mathematics Minor.

Relevant Courses:

* **CSC209 Software Tools and Systems Programming**: Wrote advanced programs in **C/C++**,learned how to use Linux command line tools
* **CSC369 Operating Systems**: Developed a UNIX-style Operating system kernel using **C**
* **CSC258 Computer Organization**: Created an ALU using breadboards designed using Logisim.
* **CSC309 Web Programming:** Developed a full-stack web application using **Django**, **React**, and **Tailwind**
* **CSC301 Software Engineering:** Worked with a real-world client to help improve their app using **Vue**, and **SQL**
* **CSC343 Intro to Databases:** Using Relational algebra, wrote, debugged and analyzed variety of **SQL** queries for **RBDMS** **systems**.

**EXPERIENCE**

**AMD, Software Engineering Intern May 2023 – April 2024**

* Analyzed and debugged **BSoD** (Blue Screen of Death) crash dumps from Windows Insider Program users using **WinDBG**, identifying critical errors to the **C++** GPU driver code, resulting in up to **10,000+** global decreases in GPU driver related crashes for each failure type identified.
* Developed a crash dump parsing tool using **Python**, effectively collecting and analyzing essential data from **10,000+** crash dumps per minor driver release to improve driver stability and performance.

**Verto Health, Software Engineering Intern May 2022 – August 2022**

* Saved Verto over **$10,000+** per year in licensing costs by developing an in-house integrated PDF form wizard system using **Vue, Ruby on Rails**, and a modified version of Mozilla’s **open source** pdf.js project.
* Deployed code to **15+** Ontario healthcare clients by contributing over 12+ tickets to the major release version 3.21 of Verto’s clinician software suite.
* Improved developer productivity by contributing around 2-4 agile development story points per week alongside cleaning out backlog tickets including projects in **Angular, Vue,** and **Rails**.

**Precisely, Software Engineering QA Intern June 2021 – August 2021**

* Integrated automated testing into the Elastic stack by using a **Python** Gitlab workflow to convert Junit, Nunit, and TestNG tests into useable Elasticsearch documents.
* Created the CI/CD dashboard for the Spectrum Spatial enterprise product using Kibana.

**University of Toronto - Department of CS , Software Developer May 2021 – August 2021**

* Worked on the development team for PythonTA, a static analysis error-checking **Python** library used by **500+** undergraduates each year.
* Updated documentation and code to more easily be navigated and understood by other developers and to provide a streamlined user experience.

**PROJECTS & LEADERSHIP**

**Exec Member and Developer, UofT Hacks June 2021 - Present**

* Created the hacker registration dashboard using **React**, which is used by **300+** participants annually to register and search for teammates.
* Improved code maintenance by containerizingmany of the UofT hacks legacy and currently used source code repositories using **Docker**.

**Decay, Horror Game Project January 2021**

* Created a horror video game using **C#** and the Unity game engine.
* Managed a development team digitally and maintained a codebase using Unity Collaborate.
* Gained over **200,000+** impressions and 500+ downloads.

**SKILLS**

**Programming Languages:** Python, C#, Javascript, Java, SQL, HTML, CSS, C/C++

**Frameworks/Libraries:** React, Vue, Ruby on Rails , Node, Flask, AR Core, Pytorch, Tensorflow

**Other:** Git, GitHub, Docker, SSH, Unity, Google Cloud API, Figma, Bash/Zsh, Vim

**AWARDS**

**1st place - MLH Hackerverse 2022:** Won 1st overall out of 52 participants in this XR-themed hackathon.

**1st place - MLH Pride Hacks 2021:** Won 1st overall and Best Pride Hack out of 186 participants.

**3rd place - MLH Surfs Up Hacks 2021:** Won 3rd overall out of 322 participants and 79 submissions.

**A&S Dean’s List Scholar (2) 2020-2021, 2021-2022:** Awarded to students with high academic performance, achieving a 3.5+ GPA with 5.0 FCE credits.

**Top 25 - RU Hacks 2021 Hackathon:** Placed top 25 overall out of 577 participants and 143 submissions.