

Gabriel Ethan Vainer

647-271-6729 | vai9er@gmail.com | linkedin.com/in/vai9er | github.com/vai9er | vainer.dev

EDUCATION

University of Toronto

Bachelors in Computer Science; Software Engineering Stream

Toronto, CAN

Sep. 2020 – Apr. 2024

Awards: *2021 Dean's List, University of Toronto Entrance Scholarship*

EXPERIENCE

Teaching Assistant

Jan. 2023 - Present

*University of Toronto, **CSCA08**(Winter 23', Winter 24'), **CSCD03**(Fall 23')*

Toronto, CAN

- Facilitated student learning and engagement as a lecture TA for an introductory course on procedural programming in **Python** and taught core computer science topics including **Sorting Algorithms**, **Complexity**, and **Testing**

Software Developer Intern

Apr. 2022 – Mar. 2022

Empyrean Medical Systems

Miami, USA

- Created a **C#** Controller API for real-time system updates on **DWIN DGUSII LCM** displays by utilizing the **.NET SerialPort** library for secure hex byte packet validation and transmission.
- Overhauled Empyrean's Dosimetry Engine written in **C** by integrating dosage algorithms and **TCP/IP socket** protocols to enhance operational efficiency in estimating radiation exposure for **IR** equipment.
- Transformed the original engine into a well-structured, non-monolithic system, reducing the main engine file by **64%** while maintaining functionality, responsibility, and clean architecture.

Software Engineer Intern

Jan. 2022 – Apr. 2022

Royal Bank of Canada

Toronto, CAN

- Engineered new **microservices** for RBC's client systems application, enhancing features on the File Management and User Compliance API's using **Java**, **Maven**, **Git**, and the **Spring Framework**
- Implemented comprehensive end-to-end test cases using the **Cucumber Framework** to ensure the reliability, functionality, and performance of critical software systems.

Frontend Developer

Jan. 2023 - Present

Taichi Graphics

Toronto, CAN

- Engineered Taichi's internal technical documentation frontend using **React** and **Docusaurus**, streamlining developer engagement and project onboarding for the open-source community.

PROJECTS

UofT Blueprint | *Typescript, React, Next.js, Firebase*

- Led a team of 4 developers in architecting and implementing UofT Blueprint's website redesign and a custom CRM solution using **TypeScript**, **React**, **Next.js**, and **Firebase**, applying **Agile principles** for efficient sprint planning and task distribution.

deChess | *ETHGlobal Hackathon, ReactJS, Javascript, Chessground*

- Co-developed a P2P chess platform with NFT pieces and chat system using **React** and js-waku which won over **\$6000** from 5 sponsors

System Monitoring Tool | *C, Bash, Linux*

- Designed and deployed a high-accuracy Linux system monitoring tool in C, providing dynamic, real-time analysis of system metrics with a user-friendly CLI, advanced security features, and customizable graphical reporting.

BookMeBot | *Python, Javascript, Node.js, Selenium, Git, MySQL*

- Developed a **booking automation API** using **Selenium and Python** for a chat bot that allows users to quickly book multiple gym times in advance (via Discord and Facebook Messenger) without authentication.

TECHNICAL SKILLS

Languages: Python, C, Java, JavaScript, Typescript HTML, CSS, SQL

Frameworks and Databases: React, Django, Mongo, Spring, Cucumber, MySQL, Firebase, Next.js

Environments and Tools: Linux/UNIX, Maven, Selenium, Git, Node.js, Material UI, Postman, JUnit, Jira