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## Technical Skills

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- Experienced with the following technologies:
  - o C programming, C++, Node.JS and JavaScript, React, React Native, Java, SQL, Python, HTML, CSS, PHP, MongoDB, Docker, Express.JS, shell scripting, Microsoft Azure, jQuery, Bootstrap, TypeScript, CSS frameworks (TailwindCSS, etc.), WebSocket/WebRTC real-time communications, Figma
- Understanding of several Linux environments (CentOS/RHEL, Ubuntu, Debian) and Windows and have proficiency with IDEs and version control (basic SVN and Git)
- Running knowledge of Agile methodologies, Scrum

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## Interpersonal Skills

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- Work well in teams from the frequent collaboration required in several projects in both personal projects and employment (The Varsity's magazine projects, full overhaul of main website)
- Excellent time management, demonstrated through ability to meet timelines and at times exceed them
- Quick to learn, as evidenced by ability to attain necessary skills to provide services to clients in past employment
- Ability to speak and write in French to the CEFR B1 level

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## Education

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### Honours Bachelor of Science (Degree)

2019 - 2024

University of Toronto, Scarborough Campus

- Specialist in Computer Science
- Relevant courses: Introduction to Software Engineering, Algorithm Design & Analysis, Introduction to Databases, Computer Graphics, Operating Systems, Computer Networks, Computer and Network Security, Artificial Intelligence
- Relevant projects: [MCPv2](#) – an open source game server control panel, [course website](#) – course LMS and webpage, **Path Tracer** – a parallelized CPU-based ray-tracer with depth-of-field and custom bi-directional reflectance distribution function models, [crossword plugin](#) – integrated crossword editor and player for WordPress via PHP and JavaScript
- Graduated with Distinction in 2024 Spring Convocation

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## Awards and achievements

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- University of Toronto, Scarborough - Dean's list Fall 2021
- University of Toronto, Scarborough - Dean's list Fall 2020

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## Experience

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### Varsity Publications Incorporated

January 2021 – April 2024

Backend Web Developer

- Led a full rewrite with the frontend developer of the main website and reduced external dependencies for reliability and maintainability.
- Led a transition to Microsoft Azure to reduce costs for the organization and to help ensure a near 100% uptime for past 18 months.
- Implemented safeguards against security incidents with full site isolation. No security incidents have occurred since the start of my tenure.
- Co-managed the development of four web magazine projects with custom graphical effects and delivered them on-time and maintained constant feedback and communication loop with stakeholders. Example available at <https://hindsight.thevarsity.ca>.

### Fortran Traffic Systems Limited

May 2022 – August 2022

Junior Software Developer, Summer Student (Full-time)

- Developed solution to a problem in which Z1-based sensors were not being queried for previous data in case of disconnection, improving fault-tolerance and continuity
- Assisted in the validation of a connected transit signal priority system via application logging and a custom tool, leveraging a custom heuristic to determine stops with limited data sources
- Performed quality-assurance testing on changes to critical software.

## **247Studios**

April 2020 – August 2020

### Software Developer Intern

- Recognized for designing a related posts plugin for a client's WordPress site that improved user retention by about ~30%. Around 1 million visitors to the site monthly
- Adapted quickly to client needs and learned basic Arabic grammar to be able to perform natural language processing on articles
- Successfully implemented custom HTML, PHP, and CSS interface within WordPress to allow publishing editors to tune the plugin's parameters, ensuring its effectiveness for the client