

# Greg Forster

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## EDUCATION

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McMaster University, *Honours Computer Science*

Sept 2022 – Apr 2026 | Hamilton, ON

Graz University of Technology, *Exchange Year*

Sept 2024 – Aug 2025 | Graz, Austria

## TECHNICAL SKILLS

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**Languages:** Typescript/Javascript, Python, C/C++, HTML/CSS, PHP

**Frameworks:** React, Next.js, Node.js, WordPress, Shopify, Laravel, REST API, GraphQL

**Developer Tools:** Git, Docker, Linux, Buddy, Amazon Web Services

**Libraries:** Tailwind, Pytorch, Webpack

## EXPERIENCE

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The Dunham Group, *Software Developer*

Jan 2021 - Aug 2024 | Hamilton, Ontario

- Managed **30+ Linux cloud servers**, configured **Nginx/Apache** reverse proxies, and streamlined production deployments.
- Built **WCAG 2.1-compliant** interfaces across 7 client sites, passing automated and manual audits.
- Hired and onboarded 2 developers; led technical decisions on tooling and architecture for a **5-person engineering team**.
- Built integrations syncing **5000+ SKUs and 200+ daily orders** between Shopify and ERP systems for 3 client migrations; customized themes to meet business requirements.
- Led development of a technical proposal that **secured \$50,000 in funding**; managed project scope, timeline, and deliverables.
- Optimized Webpack configurations, **reducing load times by 80%** and minimizing bundle sizes.
- Audited **AWS** infrastructure and eliminated unused services, **reducing monthly cloud costs by \$2,000**.

## PROJECTS

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Geckode, *Website – Active Development* [Next.js, Typescript, Tailwind, Phaser.js, Blockly]

- Building a **drag-and-drop block programming** tool inspired by Scratch and MakeCode using Next.js and Typescript.
- Integrated **Google Blockly** for visual programming with **custom block definitions** for game logic.
- Developed a **real-time code preview** using Phaser.js to render user-created games in the browser.

SWEB Modifications, *OS Kernel* [QEMU, C++, C]

- Extended a single-process kernel to support **multi-processing, multi-threading**, and execution of **userspace programs**.
- Developed **system calls** for process creation, memory allocation, and **inter-process communication**.

2D RL Environment, *AI Agent* [Python, Pytorch, Pygame]

- Developed a 2D game environment with **Newtonian physics simulation** for reinforcement learning experiments.
- Implemented custom **reward shaping** and **state representations** to improve agent convergence.

## VOLUNTEERING / ACHIEVEMENTS

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**Ukraine Volunteer:** 2 weeks rebuilding in Chernihiv, August 2025

**Hamilton Ultimate:** Ongoing volunteer maintenance of club website

**Austrian National Champion** in Ultimate Frisbee, October 2024

**International Competition:** Played tournaments in 8 countries