Brian Gao

bhgao@uwaterloo.ca | (416) 839-8839 | briangao.me | linkedin.com/in/bhgao | github.com/BENJIGAO

EDUCATION

University of Waterloo

Sep 2021 - May 2026

Systems Design Engineering (Bachelor of Applied Science)

Waterloo, ON

Cumulative GPA: 89% (3.95/4.0) | Courses: Data Structures and Algorithms (C++), Digital Systems (C)

EXPERIENCE

Arctic Wolf Networks

Sep 2022 - Present

Software Engineering Intern

Eden Prairie, MN

- Launched interfaces in Django with Kubernetes for an intelligence platform used by 1000+ stakeholders
- Integrated CI/CD with GitHub Actions, Bazel, and Harness, automating AWS deployments (Helm, EKS)
- Architected a field-mapping framework with C4 system diagrams and Python, reducing pipeline bottlenecks
- Won a company hackathon (80+ participants) with a team by designing Go APIs that provide IP-blockers

Waterloop

May 2022 - Present

Full Stack Developer

Waterloo, ON

- Developed 3+ REST APIs with PERN for a website facing potential sponsors and 5000+ monthly traffic
- Designed the database schema for the team merch store and developed 15+ unit/integrations tests thereafter using systems design methodologies and Mocha/Chai, deploying a highly requested feature to production
- Built a secure and industry-standard authentication flow by integrating OAuth 2.0 with Google Identity

JANA Corporation

Jan 2022 – Apr 2022

Software Engineering Intern

Aurora, ON

- Pioneered 4+ project deliverables with **React/Redux** for a risk management tool generating \$20 million/year
- Implemented downloadable risk reports using TypeScript, providing customers with executive-friendly pdfs
- Published 5+ npm packages with Storybook and Lerna, enabling code reusability across the software team
- Spearheaded a company presentation on web security to 50+ employees, increasing awareness of best practices

Midnight Sun Solar Car Team

Sep 2021 – Jan 2022

Firmware Developer

Waterloo, ON

Programmed microcontrollers in C to control the power distribution and state of the MSXIV, a solar car

PROJECTS

<u>ScanEats – WinHacks (winner)</u> | Python, JavaScript, Flask, React, TensorFlow, Postman

Built a hackathon-winning (200+ participants) lifestyle app with Flask that analyzes food quality

Youtistics | TypeScript, React, Google Cloud Platform, YouTube Data API, Google Identity, Postman

• Engineered a statistics app using GCP and YouTube Data API that provides insight into user viewing-habits

G-aim - StormHacks | JavaScript, React, NodeJS, Express, MongoDB, Postman

Created an aim-training game with NodeJS/Express and MongoDB that educates users about climate change

SKILLS

- Languages: TypeScript/JavaScript, Python, SQL, Go, C/C++, HTML/CSS
- Frameworks: Amazon Web Services, NodeJS, Express, Docker, Kubernetes, Flask, Google Cloud Platform
- Libraries/Tools: Git, React, PostgreSQL, MongoDB, Bazel, Harness, Jira, Postman, Unix/Linux, REST APIs