Sangwoo Han

[Website](#) | [GitHub](#) | [LinkedIn](#)

TECHNICAL SKILLS

Languages and Databases: Python, JavaScript, PostgreSQL, MySQL, Redis
Frameworks/Libraries: Flask, Express.js, PyTorch, RabbitMQ
Developer Tools: Azure, Cloudflare, Docker, Jira, Jenkins, GitHub Actions, Elastic, Kibana, Logstash

WORK EXPERIENCE

Software Developer | DNEG   May 2022 – Present

Python, Flask, MySQL, RabbitMQ, Jira, Jenkins, Elastic, Kibana, Logstash   *Montreal*

- Designed and implemented an asynchronous automated testing service with RabbitMQ, reducing key testing workloads by up to 50%.
- Implemented scalable APIs to manage DCC assets with Flask and MySQL.
- Addressed regular production bugs and feature requests leveraging an Agile workflow with Kanban boards to prioritize tasks and integrating CI/CD to rapidly iterate.
- Implemented and maintained unit/integration/e2e testing on major web services.
- Enriched system metrics with Elastic, Kibana, and Logstash.

Software Developer Intern | Atelier Paper   May 2021 – September 2021

Azure, Node.js, Express.js, PostgreSQL, Redis, GitHub Actions   *Remote*

- Designed and implemented scalable APIs to manage construction documents with Express.js and PostgreSQL.
- Reduced response time by up to 80% of key REST API endpoints by updating database indexes and implementing caching with Redis.
- Identified and addressed SQL injection vulnerabilities in major services.
- Containerized services with Docker, deployed with Azure, and integrated CI/CD with GitHub Actions.

PROJECTS

Instant Messaging Social Platform | [Link](#)

Flask, PostgreSQL, React.js, Auth0, Socket.IO, Azure (Static Web Apps, App Services, Web PubSub)

- Designed and implemented a microservice architecture with a web, chat, notification, and online presence service.
- Containerized services with Docker, deployed with Azure, and integrated CI/CD with GitHub Actions.
- Implemented a single-page application in React.js, added authentification with Auth0, and deployed it with Azure Static Web Apps leveraging global hosting, reducing load time by up to 70%.

BitTorrent Client | [Link](#)

Python

- Implemented bencoding and bdecoding algorithms to parse Torrent files.
- Extensively used socket programming to communicate with trackers and peers.
- Leveraged multithreading to concurrently download data from peers, reducing average download time by 95%.

Live Sign Language Detection | [Link](#)

Python, PyTorch, React, Cloudflare

- Trained a neural network to recognize sign languages using PyTorch.
- Built a single-page application with webcam access with React.js.
- Deployed the application with Cloudflare CDN, reducing load time by up to 63.33%.

EDUCATION

Concordia University   Montreal

Bachelor in Computer Science and Mathematics   *Aug 2018 – May 2022*

- GPA: 3.5