Nathan Cai

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Toronto, ON

EDUCATION

Queen's University   Kingston, ON
Bachelor of Computing   *Expected May 2025*

EXPERIENCE

Back End Developer   Aug 2022 – Present
Queen's Computing Students Association (COMPSA)   *Kingston, ON*
- Contributed to the development of an event management platform's backend used by 1000+ students in the School of Computing.
- Implemented and tested over 10 endpoints that accounts up to 20% of API requests using Flask and Python
- Engineered the production monitoring and logging of backend using Python's logging library to streamline production error handling and reduce debugging time by up to 20%

Front End Developer   Feb 2021 – Sep 2022
BlackMINT   *Toronto, ON*
- Used Strapi to create a Content Management System to an audience for 100+ users
- Collaborated with UI/UX designers to make a user friendly and responsive website using React and Material UI
- Integrated the Google Calendar API onto website to set reminders and book meetings for users for scheduling and time management

Research Assistant   Jul 2021 – Aug 2021
Queen's University Software Analysis Intelligence Lab (SAIL)   *Toronto, ON*
- Wrote Python scripts to parse data to research the downgrading of NPM dependencies in the NPM ecosystem
- Created a Python script that parsed over 30k lines of data to download NPM packages and traverse its version history and output results to a CSV file

Hackathon Event Organizer   Mar 2021 – Jun 2021
Recess Hacks   *Toronto, ON*
- Led a team of 5 web developers to deliver a lightweight, responsive, user-friendly, and accessible website
- Reviewed more than 40 pull requests and resolved merge conflicts to ensure best practices
- Created an SEO friendly website by using keyword rich texts, best code practices, and reducing load times to garner over 100 participants registered on DevPost

PROJECTS

FoodFlation | *HTML, SCSS, NextJS, NodeJS, Puppeteer, MySQL*   Apr 2022 – Present
- Programmed a website that allows users to view the price history of grocery store items and to find the cheapest items in the city with NodeJS and NextJS
- Developed a web scraping bot in Puppeteer to scrape the prices of over 15k grocery store items across 70 stores in Canada and the US
- Deployed a NodeJS backend and NextJS frontent to AWS Lambda and Vercel
- Managed the SEO of website using Google Search Console and sitemaps to garner over 200 visitors

Email Cleaner | *TypeScript, NPM, GitHub Actions*   Feb 2020
- Created and launched a package on NPM with up to 750 downloads in the initial 2 weeks
- Created Continuous Delivery workflows with GitHub Actions to reduce deployment times by 50%
- Wrote over 700 lines of unit tests using the Jest testing library with over 80% test coverage

TECHNICAL SKILLS

Languages: HTML, CSS, JavaScript, Python, Java, C++
Frameworks/Libraries: React, NextJS, Express, jQuery, Jest
Technologies: Git, Linux, NodeJS, REST API, MySQL, MongoDB, SCSS, TypeScript