Nathan Skoczkowski

647-838-3732 | njskoczk@uwaterloo.ca | linkedin.com/in/nskoczkowski | github.com/nskocz | njskoczk.com

EDUCATION

University of Waterloo

Candidate of BASc. Electrical Engineering

• Relevant Courses: Calculus 1-3, Digital Circuits, Linear Circuits, Electricity and Magnetism, Data-structures & Algorithms

TECHNICAL SKILLS

Software: C, C++, Python, JavaScript, TypeScript, HTML/CSS, Java, SQL, PHP, Kendo, ReactJS, Angular JS, Angular 2+, Matlab, Tkinter, NumPy Hardware: AutoCad, Embedded Firmware Development (STM32), VHDL, Assembly Tools: Git, Docker, Jira, Google Cloud Platform, AWS, Azure, Flask, Bitbucket, StableDiffusion, Pytorch, Firebase

Applications: Excel, Word, Office Software, Unix, Bash

EXPERIENCE

Software Developer

CIBC - Innovation Banking

- Developed a Python-based automation tool, converting a completely manual, 3-hour daily Excel task into a streamlined, efficient process. This innovation significantly enhanced operational efficiency by making the tool easily usable by non-technical team members.
- Implemented user-friendly OOP principles and created comprehensive documentation including API documentation, user manuals, and system architecture diagrams. This ensured seamless adoption by a diverse 100+ member team and facilitated maintenance and future enhancements.
- Employed advanced data manipulation with industry standard tools saving 1,000+ hours annually by enhancing financial reporting accuracy and efficiency.
- · Participated in weekly meetings to deepen lending practice insights and solicit product feedback, leading to iterative enhancements. Developed leadership in integrating technical solutions with business strategies, significantly exceeding user expectations.

Software Developer Co-op

Full Circle Transport Management System (TMS)

- Collaborated with the software engineering team on a client-centric application, actively contributing in daily scrums alongside senior engineers.
- Optimized codebase performance by transitioning key components from AngularJS to Angular 2, enhancing overall system efficiency.
- Impacted and optimized 200+ key components by enhancing site reliability leading to improved user experience and reduced load times.
- Achieved a 20% performance boost and significantly enhanced user experience by leveraging JavaScript, TypeScript, HTML/CSS, Kendo, Angular, and AngularJS to optimize and refine frontend components, ensuring smoother interactions.
- Maintained code integrity across 500+ files and streamlined workflow by ensuring consistent Git commits and adherence to best practices.

Software Developer

Sakura Capital Inc

- Oakville, ON Formulated software solutions for holding companies, utilized Python to automate financial reporting processes and data management capabilities.
- Architected and executed frontend solutions leveraging JavaScript, HTML/CSS, and AngularJS to enhance user interfaces and experiences.
- Partnered with fintech experts to conduct technical due diligence, reviewing key programs and websites, streamlining the company acquisitions process.
- Achieved a 15% increase in operational efficiency by collaborating with 3+ operating companies to develop custom websites using AngularJS and JavaScript, enhancing process automation.

PROJECTS

Formax-Fit | *HTML*, *CSS*, *JavaScript*, *Firebase*, *Django*, *NoSql*

- Devised a dynamic web platform that enables users to monitor and analyze their personal fitness data, including workouts, calorie intakes, weight fluctuations, and supplement intake, fostering a comprehensive approach to health management.
- Integrated Firebase for user authentication, and secure hosting, leveraging a NoSQL database to ensure scalable storage of non-dependent user data.
- Developed an intuitive web interface that presents personalized insights into weight trends, strength progression, and caloric consumption over user-defined periods, enhancing user engagement through interactive data visualization.

Cmdexec | *Python*, *Docker*, *Sandboxie*, *Tkinter* (*Python*)

- Formulated and implemented a robust Python application that empowers users to initiate and manage multiple programs via intuitive command-line inputs.
- Pioneered Docker containerization, achieving a 99.9% secure execution rate for over 1,000 user-specified programs. This implementation bolstered system resilience, ensured isolated environments for each task, and provided risk-free operations, enhancing overall user trust and satisfaction.
- Employed the Tkinter library to craft a user-friendly GUI tailored to the application's core functionalities. This strategic design choice enhanced accessibility, ensured intuitive and seamless user input, and significantly reduced learning curves for new users.

Moisture Zone | CAD, C++, Git, TinkerCad, STM-32

- Innovated an STM32-driven system that intelligently irrigates soil by detecting and responding to moisture levels, promoting sustainable farming.
- Introduced a multi-tiered moisture detection algorithm using C++, enabling precise water release based on soil conditions.
- Designed an intuitive LED display, offering users real-time visualization of soil moisture metrics and irrigation status.

EXTRACURRICULAR EXPERIENCE

President

Chess Club

- Coordinated annual tournaments with other schools in the Halton region with over 100 participants and 5 schools in attendance.
- Established and implemented executive recruitment which expanded executive team from 2 to 5 members, creating new roles and opportunities. Increased total club participants by 20 with prior years having dwindling numbers at around 10 people.
- Created and delivered multiple presentations on chess strategy to help club members.

June 2021 - August 2021, May 2023 - September 2023 Oakville, ON

February 2024 - Present

June 2022 - September 2022

February 2022 - March 2023

September 2022 - March 2023

September 2019 - June 2022

Oakville, ON

Waterloo, ON

2022-Present

January 2024 - May 2024

Toronto. ON