Owen Cooke

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EDUCATION

University of Alberta – Edmonton, AB, CAN   **Sep 2020 – May 2025**
BSc in Computer Engineering Co-op – Software Option   *GPA: 4.0*
- *Scholarships:* Superior Undergraduate Achievement (2022-24), Jason Lang (2021-23)
- *Coursework:* Data Structures, Algorithms, Operating Systems, Database Management, Data Analysis and Machine Learning

SKILLS

Programming Languages: JavaScript, TypeScript, Python, Java, HTML, CSS, C/C++, Rust, SQL
Frameworks & Tools: React, Node, Spring, Flask, Qt, MongoDB, PostgreSQL, JUnit, Jest, Playwright, AWS, Kibana, Docker, Git, Unix

WORK EXPERIENCE

NimbleRx – San Francisco, CA, USA   **Sep 2024 – Present**
Software Engineer Intern
- Unblocked 85 new pharmacies from launching by building an audit tool for itemized transaction CSV downloads via React.
- Increased performance of Amazon S3 upload time by 18% platform-wide by refactoring legacy usage of the Java AWS SDK.

RBC Royal Bank – Toronto, ON, CAN   **May 2024 – Aug 2024**
Software Developer Intern, Amplify
- Innovated and filed a patent for a GenAI on-call assist system to reduce incident management toil and improve data quality.
- Enabled real-time incident updates for IT observability by integrating WebSockets with React, FastAPI, and MongoDB.

ATB Financial – Edmonton, AB, CAN   **May 2023 – Aug 2023**
Software Developer Intern
- Reduced deployment time for business banking platform alerts by 50 hours per year by developing REST APIs using Node/Express and PostgreSQL, which also led to a decrease in customer calls to client care during service disruptions.
- Built an internal tool using React for scheduling site-wide banners, eliminating manual code changes needed each sprint.

SMART LAB – Edmonton, AB, CAN   **Jan 2023 – Apr 2023**
Software Research Assistant
- Designed a survey tool via React and Firebase to help small businesses easily visualize their Industry 4.0 digital maturity.
- Built an automated repair program in Python via SciPy and PyQt to integrate with a robotic cell for repairing pipes.

LIMDA Laboratory – Edmonton, AB, CAN   **May 2022 – Dec 2022**
Software Research Assistant
- Developed a desktop app via Python and Qt for detecting 3D print defects from 3D scans to improve part quality.
- Authored a 6-page paper published in IEEE Xplore proposing an algorithm for extracting differing 3D scan-to-CAD features to enhance automated, sustainable remanufacturing.

PROJECTS

What to Code| *Buildspace*   **Jun 2024 – Present**
- Launched a software idea generation platform using Next.js, PostgreSQL, and LangChain as part of a community incubator.

RareQuest | *Code to Give*   **Mar 2024**
- Built an HTML pixel art game for a non-profit to raise awareness about the challenges of rare disease diagnosis.

MobilityMate | *Diversity in Engineering Prize, HackED*   **Jan 2024**
- Implemented an accessible AI voice assistant interface via React frontend and OpenAI APIs (GPT-3.5 and Whisper) to support senior physiotherapy patients and summarize difficulties when exercising for their medical practitioner.

TaskKeepr | *Hack the North*   **Sep 2023**
- Created a Teams bot to summarize messages and classify tasks for users using Cohere and Microsoft Graph APIs.

OutageML | *2nd Place, APIC Energy Hackathon*   **Apr 2023**
- Proposed prioritizing areas for power outage repair using React and PyTorch, to minimize emergency downtime.

VOLUNTEERING

Computer Engineering Club – Edmonton, AB, CAN   **Sep 2023 – Sep 2024**
Junior Executive, Upper Year Rep
- Refactored the club's website in React to increase the visibility of events and technical resources for students.
- Networked with early talent recruiters to gain sponsorship for club events, including hackathons and career fairs.