Noah Nefsky

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Work Experience

Software Engineer Intern | Squint AI, San Francisco   June 2024 – December 2024
- Conceptualized and prototyped a platform using **Three.js** and **Neural Networks** to transform images/videos of machines or factory spaces into interactive 3D scenes, enabling remote training for factory operators
- Built a **React-Next.js** procedure management system enabling users to create customized procedures, branch existing procedures into drafts, and track performance - improving operational efficiency and minimizing downtime
- Architected and developed role-based access controls using **React/Node.js/SQL**, where admins can restrict factory procedures and documents to user groups, enhancing operational modularity and minimizing security risks

Software Engineer | PointClickCare, Toronto   September 2023 – January 2024
- Integrated with GPT-3.5 to develop a warning system for patient health records highlighting alarming data to the practitioner, suggesting next steps (additional tests, people to contact, etc.), improving care and responsiveness
- Built a drug disposal workflow into an **Android** nursing application preventing misuse and loss of medication
- Added iOS native events for typing status and health status alerts to a **Flutter** healthcare messaging application

Junior Software Developer | GrantMatch, Toronto   May 2023 - August 2023
- Used **LangChain** and past grant data to auto-complete grant application forms, reducing filing from hours to minutes
- Implemented grant filing request and approval notifications using **Django** and **Vue.js**, improving user responsiveness
- Created web scrapers using **Python** to collect grant information and transform it into usable data

Software Engineer Intern | Thoughtwire, Toronto   May 2022 - August 2022
- Created a **TypeScript** VSCode extension to streamline RDF code navigation and automate project uploads for testing on a virtual machine, saving developers 90% of the time compared to manual methods
- Fixed bugs for a **Java** backend data collection application that serves IoT device data to a digital twin

Junior Software Engineer | Sparcblock, Toronto   May 2021 - August 2021
- Built a **Windows** application to securely automate accounting updates, enabling the closure of a client deal
- Developed **Java RESTful APIs** to integrate with accounting solutions and automate vendor payments using **Spring Boot**

Education

University of Waterloo, Ontario   September 2020 - April 2025
- Honours Bachelor of Computer Science (co-op) with Economics Minor
- **Courses (mainly C++):** Algorithms, Data Structures, Application Development, Operating Systems, Compilers, Object-Oriented Programming, User Interfaces, Bioinformatics, Functional Programming, Statistics

Swiss Federal Institute of Technology Lausanne (EPFL), Switzerland   February 2024 - June 2024
- **Master's Level Courses**: Computer Vision, **(NumPy and PyTorch)**, Data Visualization **(D3)**, Economics

Projects

Preesh Rewards **(React native, Firebase, Redux)**
- Built a mobile application to reward users for tipping allowing them to track and utilize points earned
- Included authentication, redeeming points for gifts, tracking history, saving deals, categorized searching, etc

SEC Filings AI Processing and Search **(Python, Spark, Palantir Foundry)**
- Built a system to process and semantically search millions of SEC filings to extract time series financial data

WLP4 Compiler (C++)
- Engineered a compiler for WLP4, a small subset of C++, to generate MIPS assembly code

Skills

- **Languages**: Python, Typescript, C++, Java, Kotlin
- **Frontend/Mobile:** React.js, TanStack, Jotai, Flutter, React Native, Redux
- **Backend/Other:** SQL, Node.js, Spark, PyTorch, NeRFStudio, Firebase, Spring Boot, Django, LangChain