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Education

University of Toronto Expected: Dec 2025

Master of Engineering, Electrical and Computer Engineering

University of California, Berkeley Dec 2020

Bachelor's Degree of Science, Electrical Engineering and Computer Science

Relevant Experience

Work Study Position / University of Toronto **Oct 2024 – June 2025**

- **Prototyping** and AI-powered note-taking platform using large language models, **reducing** manual transcription effort by 50%.
- **Explored** Retrieval-Augmented Generating (**RAG**) to build an interactive Q&A system to answer lecture related questions.
- **Collaborated** closely with the University of Toronto's Accessibility Services and Professors to validate the feasibility and ensure data is stored under the University's privacy guidelines.

Teaching Assistant | ECE244(C++)/APS105(C)/APS106(Python) | University of Toronto **Sep 2024 - Present**

- **Guided** 100+ students through programming assignments, debugging, and software tool usage, improving project submission quality.
- **Developed** lab materials and tutorials in conjunction with course instructors, ensuring alignment with learning outcomes.
- **Facilitated** interactive labs and office hours, enhancing students' problem-solving skills and course engagement.

Snefru Chatbot / University of Toronto / https://learningc.org **May 2024 – Present**

- **Designed** and **implemented** a retrieval-augmented chatbot (**RAG**) using **Python** (**Langchain**) and **JavaScript**, delivering real-time, contextually accurate responses.
- **Enhanced** the professor's website with a responsive frontend (**HTML, CSS, JS**), improving UX for students seeking immediate clarifications.
- **Optimized** the backend to achieve sub-second response times, increasing user engagement by 20%.

Mobile Software Engineer (Swift) / Dream Formula Education **May 2021 – May 2022**

- **Led** the development of an iOS app to assist students in organizing and managing their academic responsibilities.
- **Collaborated** closely with stakeholders, including educators and students, to understand requirements and gather feedback for iterative improvements.
- **Implemented** secure Firebase-based authentication, providing a user-friendly onboarding experience.
- **Delivered** iterative updates based on feedback from pilot users, improving overall performance and usability.

Skills

- **Programming Languages**: **Python**, JAVA, JavaScript, C, C++, Swift, HTML, Rust
- **Other Tools**: NumPy, PyTorch, React, React Native
- **Additional**: Retrieval-Augmented Generation (RAG), Large Language Models (LLMs)