Tyler Beach

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EDUCATION

University of Alberta

Edmonton, AB

Bachelor of Science - Computer Science

April 2025 (Expected)

Relevant Coursework: Software Engineering, Data Structures and Algorithms, Database Management

PROJECTS

Event Management App | Java, Firebase, Git

- Developed a user-friendly **Android application for Software Engineering course**, enabling event attendees to check in via QR codes, streamlining the registration process
- Collaborated on design and implementation, ensuring seamless integration of features and alignment with course objectives, resulting in a highly functional and user-friendly application
- Implemented Firebase within the QRCheckIn app, ensuring **real-time updates** of event details and attendee status, and delivering **instant notifications** to enhance user engagement and provide a professional app experience.

Story Teller | React, JavaScript, CSS, Python, Flask, OpenAI, ElevenLabs

- Developed web application that creates children's stories with accompanying images and narrates them using text to speech technology for a unique experience every time.
- Integrated **OpenAI's generative text API** for story generation and utilized ElevenLabs for high-quality **text to speech narration** to enhance user experience.
- Contributed to a **team-driven project** during a competitive **hackathon**, collaborating closely with peers to develop the application in a timely manner

FireSafe | Python, TypeScript, HTML, CSS, Streamlit, TensorFlow, MongoDB

- Engineered a **full-stack web application** within a **48-hour deadline** for a climate activism hackathon, focusing on real-time forest fire alerts
- Ensured product robustness and scalability, placing in the top 6 out of 200 participants
- Utilized Git for **version control**, managing feature branches, and tracking changes throughout the development process

Pomodoro Study Timer | React, JavaScript, CSS

- Designed and developed a Pomodoro Timer web application to enhance study and work efficiency, utilizing React for dynamic user interface updates.
- Added a **goal-setting feature**, enabling users to add items to a list and track their objectives for each study session helping maintain focus on specific tasks.

SKILLS

Languages: Python, Javascript, Java, C, Julia, SQL, CSS, HTML

Technologies: Firebase, MongoDB, Linux, Neovim, Git, Github, Figma

Libraries: React, Flask, Tailwind, Bootstrap, Axios, Fetch