

# Willis Frank Cao

San Francisco, CA (US Work Authorized - TN/Canadian Citizen) | Availability: **Immediately**

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## EDUCATION

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### University of British Columbia

*Bachelor of Computer Science – Average: 85.6% (GPA: 3.95/4.33 equivalent)*

Vancouver, BC, Canada

Aug. 2022 – May 2025

### University of British Columbia

*BSc Cellular, Anatomical, & Physiological Sciences – Average: 88.2% (GPA: 4.20/4.33)*

Vancouver, BC, Canada

Aug. 2017 – May 2022

- **Honours Thesis:** *Investigating the potential existence of a novel hippocampal feedback system between deep subiculum neurons and the dentate gyrus.* [\[Link to PDF\]](#)
- Recipient of the **Physiology Prize** for the best honours thesis of the graduating class of 2022.
- Recipient of the **J Fred Muir Memorial Scholarship in Science** in 2018 for academic excellence.

## TECHNICAL SKILLS

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**Languages:** Python, Swift, TypeScript/JavaScript, C#, Java, Go, C/C++, SQL, R, HTML, CSS

**Frameworks & Libraries:** .NET MAUI, Xamarin, React, Node.js, Express.js, pandas, NumPy, scikit-learn

**Developer Tools:** Google Cloud Platform, Azure, MongoDB, Git, Docker, Claude Code, Cursor, XCode

## WORK EXPERIENCE

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### Software Engineer Intern - Mobile

*Cambio Earth*

Sep. 2023 – Aug. 2024

Vancouver, BC, Canada

- Developed map layer tools and implemented backend computations for an ArcGIS-based iOS and iPadOS platform for geological engineering, using **C#**, **.NET MAUI**, and **SQLite**.
- Ported key features from a TypeScript/React web platform into .NET mobile application and designed reusable UI components tailored to mobile workflows, improving client usability and satisfaction.
- Refactored backend services to use Data Transfer Objects (DTOs) in place of .NET entities; optimized LINQ queries for runtime efficiency, significantly reducing technical debt.

### Clinical Research Coordinator

*Providence Health Care Research Institute*

Sep. 2020 – Aug. 2021

Vancouver, BC, Canada

- Managed over a dozen clinical studies and trials, leading all phases from ethics approval through patient recruitment, informed consent, and data collection.
- Built and maintained secure REDCap databases to automate the management, distribution, and collection of clinical questionnaires.

## PROJECTS

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### VoiceOver Links [\[GitHub\]](#) | *JavaScript*

- Developed a Firefox extension that improves accessibility and security for screen reader users by dynamically adding ARIA labels to announce external link destinations and cross-origin form submissions.

### AI Voice Phishing Demo [\[GitHub\]](#) | *TypeScript, React*

- Built a **React/TypeScript** app to demonstrate how given a victim profile, LLMs (Google Gemini API) and AI voice synthesis (ElevenLabs API) can be used to generate realistic and targeted phishing scams.

### Gallery Manager [\[GitHub\]](#) | *JavaScript, Node.js, MySQL*

- Built a **JavaScript/Node.js** application for managing art, artists, and visitor records with aggregate statistics.

### UBC Royale - Social Campus RPG [\[DevPost\]](#) | *Python*

- Awarded the **nwPlus HackCamp Creativity Prize** for building a functional prototype of a Pokémon-inspired 2D top-down game, allowing players to walk across a map of campus, meet, and battle other students.

### Distributed Raft-Based Key-Value Store | *Go, RPC, Raft Consensus Algorithm*

- Engineered a fault-tolerant, high-throughput key-value store in **Go** using Raft consensus, designing leader election and log replication for linearizability and optimizing commit indexing to support concurrent client operations with minimal latency.