

## EDUCATION

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- **University of British Columbia (UBC)**  
*BSc in Mathematics (Computational)*

Vancouver, BC  
Graduating May 2027

## SKILLS

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**Languages:** Python, Java, C++, JavaScript, TypeScript, SQL, HTML, CSS

**Frameworks/Tools:** Best Practices Prompting, FastAPI, Flask, Django, Express.js, React, Node.js, LangChain, TensorFlow, Gemini API, Cytoscape.js, spaCy, scikit-learn, ChromaDB, Docker, Git, GitHub Actions, Pandas

**Areas:** Frontend, Backend, Machine Learning, NLP, RAG systems, Computer Vision, API design, Data Pipelines, Cloud (AWS), Full-stack development

## ACHIEVEMENTS

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**Hackcamp 2025 (nwPlus):** 18-hour hackathon; collaboratively built Code Lantern in a team of 3, focusing on rapid prototyping and AI-powered developer tooling.

**Kickstart 2025 (UBC Biztech):** A week-long startup competition where we validated a startup idea, built an MVP, and launched to a real customer.

## CERTIFICATIONS

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- **SWE Intern Certificate — HackerRank:** Skills tested - SQL, C++, debugging and DSA
- **Supervised ML — Stanford Online:** Regression, classification, regularization, and model evaluation
- **Javascript Masterclass — Ultimate Courses:** Scalable JS architecture, async patterns, and tuning.
- **Typescript Masterclass — Ultimate Courses:** Scalable TS architecture, async patterns, and tuning.

## PROJECTS

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**Code Lantern** — Python, Javascript, HTML, CSS, FastAPI, Gemini-API, Cytoscape.js, React.js *Hackcamp 2025*  
[github.com/naomichenruoxi/code-lantern](https://github.com/naomichenruoxi/code-lantern)

- Created an **AI-powered architecture analyzer** that uses uploaded projects to reconstruct dependency graphs, file structures, and function relationships.
- Developed a **hybrid parser** for Python, JS, and TSX that combines regex and AST to enhance parsing stability and facilitate more in-depth static analysis.
- A responsive JS frontend with drag-drop uploads, interactive views, and explanation panels was delivered along with REST APIs.

**Resume Optimizer** — Python, FastAPI, spaCy, scikit-learn, React, NLP  
[github.com/Tjindl/resOptimizer](https://github.com/Tjindl/resOptimizer)

- Created a resume intelligence engine that uses **NLP to perform ATS checks**, section detection, skill extraction, and formatting analysis.
- For clean text extraction and reliable handling of various resume layouts, **spaCy NLP + PyPDF2/python-docx preprocessing** was implemented.
- Created a **TF-IDF + cosine similarity scoring model** with a React dashboard that displays relevance scores and recommendations for enhancements.

**UBC Course Assistant** — Python, ChromaDB, MiniLM, LangChain  
[github.com/Tjindl/ubc-course-assistant](https://github.com/Tjindl/ubc-course-assistant)

- Developed a **semantic** course chatbot that can decipher complicated academic queries using MiniLM embeddings and **ChromaDB** vector search.
- For clear, well-formatted course recommendations, **fuzzy lookup, intent routing, and structured RAG templates** were applied.
- Streamlined pipelines for storage and retrieval to provide quick, sub-second responses for thousands of courses

**ASL Recognition** — Python, TensorFlow, Flask, React  
[github.com/Tjindl/asl](https://github.com/Tjindl/asl)

- Created a real-time ASL recognition system with **99 % +** accuracy using a TensorFlow CNN trained on carefully selected datasets.
- Developed a webcam inference pipeline that uses batching, preprocessing, and a Flask-based model to make responsive predictions.
- Developed a React user interface for interactive model testing, uploads, and real-time gesture inference.

## EXPERIENCE

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**Tutor** — Self-Employed

Dec 2022 – Present

- Taught programming and math with an emphasis on problem-solving, algorithms, and conceptual reasoning.
- Developed customised lesson plans and project-based instruction in Python, Java, calculus, and algebra.