

Xin Lei Lin

(438) 765-4255 | xinlei.lin@mail.utoronto.ca | [linkedin.com/in/xin-lei-lin-024230217/](https://www.linkedin.com/in/xin-lei-lin-024230217/) | github.com/xinlei55555

EDUCATION

- University of Toronto – St-George, affiliated with Trinity College** Toronto, Ontario, CA
Bachelor of Science in Computer Science, and Molecular Genetics – CGPA 3.94 Aug. 2023 – May 2027
- Awards: **C. David Naylor Scholarship**: for a first-year student with **outstanding leadership**. (\$20000)
Arts and Science Scholar: for students who have maintained **high academic standing**. (\$7500)
(Deferred) **UWaterloo President's Entrance scholarship for Software Engineering** (\$2000)
- Collège Jean-de-Brébeuf (Secondary), and Marianopolis College (CÉGEP)** Montreal, Quebec, CA
International Baccalaureate, and Honours Pure and Applied Science Aug 2017 – May 2023
- 5-time elected president and student council**, editor-in-chief of **2 newspapers (40 writers – 160 pages)**, and Vice-President/organizer of **3 hackathons** (800+ participants - largest high school hackathon in Quebec).

EXPERIENCE

- DIRO (Université de Montréal) and Regeneron ISEF** October 2022 – September 2023
Research Intern Dallas, Texas and Montreal, Quebec
- 1 of 8 teams** on Team Canada for ISEF 2023 – **\$15000+ in awards**
 - Computer vision research** to translate American Sign Language to English with Professor H. Sahraoui
 - Data Analysis and Webscraping in Python and C++. Computer vision with OpenCV, Tensorflow and MediaPipe.
 - Presented 5 models (**LSTM, DNNs, CNNs, RNN, transfer learning**) to translate **25 gestures**.
 - Performed data augmentation (**x128**) to obtain the largest dataset for ASL in the world with C++ and Numpy.
 - [ISEF Project Board](#) [GitHub](#) [Demo Video](#)
- Haute Tech Orientale** May 2022 – September 2022
Frontend Developer Montreal, Quebec, CA
- Designed and deployed <https://hautetechorientale.com> using JavaScript, HTML and CSS with Bootstrap.

PROJECTS

- Re.Live – UofTHacks 11 (Cohere 1st Prize (\$1500))** | *React, Stable Diffusion and OpenPose* January 2024
- Integrated Cohere RAG, and classification to sift through a dataset of songs and images based on the user's mood.
 - Implemented a Stable Diffusion Algorithm with openPose which transposes dance moves onto people in static images, making them dance! Frontend was created with React. [Devpost](#)
- SpaCey – UTRA (Best use of Flow & Starknet (\$1000))** | *Tensorflow, C++ and React* January 2024
- Implemented a remotely controlled rover with hand signs and decentralized cryptocurrency for task distribution.
 - Created a 3000 datapoint database for 3 hand gestures. Reduced the dimensionality of the data with MediaPipe for pose-tracking (96% accuracy for 150 epochs with 2 dropout layers and 3 DNN layers). [Devpost](#)
- DriveSense – HackTheNorth (Finalist Project)** | *PyTorch, React Native, OpenCV, Django* September 2023
- Developed a **mobile application** to assess a user's driving quality with custom algorithms to measure distances by correlating the car plate size, GPS data and speed fluctuation, integrated with a Django backend.
 - Fine-tuned YOLOv5 and YOLOv8 with PyTorch for 3 computer vision models: car plate detection, traffic light colour detection and road sign detection. Mobile application with React Native. [Devpost](#)
- Classif.ai – STEMistHacks** | *React, HuggingFace LLMs* June 2023
- Fine-tuned HuggingFace LLMs to create flashcards from videos, voice recordings, and notes. [Devpost](#)
- XCHANGE – ConUHacks** | *C++, Anomaly Detection* January 2023
- Animated banking data through React, HTML, and CSS. Data analysis and summarization through C++.
 - Implemented density estimation (unsupervised learning) for anomaly detection in banking database. [Github](#)
- AIBERT – Science Fair (\$1000 in various awards)** | *NLP, Flutter (Dart), SQL* September 2021 – May 2022
- Implemented BERT, Naive Bayes and LSTM with 10000 messages for bilingual spam message detection.
 - Implementation of a database of 1 million spam numbers with PostgreSQL. Speech Recognition with Python.
 - Flutter mobile application which can analyze messages, and calls. Flask as REST API on Repl.it. [Github](#)