

# PHI LONG LAI

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**Address:** #304, 11015 29A Ave NW, Edmonton,  
AB T6J 4S8 \*\*Willing to relocate\*\*

## TECHNICAL SKILLS

**Technical skills:** Web Development, Mobile Development, Databases, Scrum & Agile, Software Development Life Cycle, Unified Modeling Language (UML), API Design, Version Control, Unit Testing, Machine Learning

**Languages:** Python, C#, R, HTML, CSS, Matlab, SQL, Java

**Frameworks:** .NET Frameworks, .NET Core, ASP.NET, Django, Bootstrap

**Developer tools:** Git, GitHub, Visual Studio Code, Android Studio

**Algorithms:** K Nearest Neighbor (KNN), Support Vector Machine (SVM), Naive Bayesian, Linear Regression, Convolutional Neural Network (CNN), Deep CNN (DCNN), Sequence to Sequence (Seq2Seq), Natural Language Processing (NLP)

**Other:** Technical writing

## WORK EXPERIENCE

**Computer Engineering Student** | Suncor Energy Inc.

Edmonton, AB

May 2022 - August 2023

- Developed user interactive web applications with C#, CSS and HTML to be integrated to the enterprise systems for real-time monitoring data and predicting future data trend
- Designed, maintained, and optimized data infrastructure for data collection, management, transformation, and access with Microsoft SQL Server Management Studio
- Designed and implemented a .NET framework console API for calculating data and updating the database on a daily basis
- Collaborated with senior developers to assure compliance with development and business goals
- Developed technical documentations as a guide for end-users and developers

**Machine Learning Intern** | Sun Asterisk

Hanoi, Vietnam

May 2021 – August 2021

- Constructed a RepVGG + Attention LSTM pipeline for an optical character recognition (OCR) problem using Python on Tensorflow and Pytorch frameworks
- Generated more data and fine-tuned the model on the generated dataset
- Built a demo model of face recognition to be deployed on an edge device (tested on Jetson Nano)
- Improved the model's performance with face tracking and liveness detection and refined the model for a better customer experience

## PROJECTS

**Web Developer** | Self-employed

Edmonton, AB

January 2024 - February 2024

- Developed a personal website using Django on Visual Studio Code
- Designed interactive user interface with CSS, HTML, JavaScript with Bootstrap framework
- Practice version control using Git and GitHub

**Machine Learning Developer** | University of Alberta

Edmonton, AB

January 2021 – April 2021

- Worked as a team to build a classification model (VGG19) for ASL to alphabet character translation using Python on Keras framework
- Enhanced performance of pre-trained models through hyperparameter tuning
- Performed integrated gradient descent on data images to interpret the model
- Documented a performance report and presented a demo to other teams

**Mobile Developer** | University of Alberta

Edmonton, AB

October 2020 – December 2020

- Developed a mobile application for borrowing books using Java on Android Studio with Firebase
- Learned about software development life cycle and practiced Scrum & Agile methodologies
- Designed software architecture and visualized the system through UML diagrams
- Implemented unit testing to ensure performances and reliability of the program

**Machine Learning Developer** | FPT University

Hanoi, Vietnam

October 2020

- Built a human face identification and recognition pipeline with YOLO and FaceNet pretrained models using Python on Pytorch framework
- Worked as team to prepare data including collecting, cleaning, transforming and splitting data
- Conducted researched on different face recognition models and evaluated their performances

## EDUCATION

**BSc with Specialization in Computing Science** | University of Alberta

Edmonton, AB

September 2018 – August 2023