Phi Long Lai

Phone: (+1) 780 695-6610
Email: llai1@ualberta.ca
LinkedIn: long-lai-454877180
Github: https://github.com/lpl-5664
Portfolio: https://phi-long-lai.vercel.app/
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
Programming Languages: Python, C#, R, HTML5, CSS3, Matlab, SQL, JavaScript
Frameworks: .NET Frameworks, .NET Core, ASP.NET, React, Django, Django REST, Bootstrap, Tensorflow, Pytorch, ONNX, Scikit-learn, Keras, Pandas, OpenCV
Developer tools: Git, GitHub, Visual Studio, Visual Studio Code (VSCode), Android Studio, MS SQL Server, Azure
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#, CSS3, and HTML5 to be integrated into the enterprise systems for real-time data monitoring and prediction
- Designed, maintained, and optimized data infrastructure for data collection and manipulation with stored procedures using Microsoft SQL Server Management Studio
- Designed a .NET framework console API for calculating data and updating the database daily
- Optimized operation performance by remodeling a decision-support system using non-linear programming reducing calculation speed by 50%
- Analyzed data using Python to search for wear patterns and data correlation in wear rate and pipe positions on Jupyter notebook
- 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
- Improved model performance with data augmentation and fine-tuning on generated dataset
- Built a demo model of face recognition for edge devices (tested on Jetson Nano)

Projects

Full Stack Developer | Self-employment
Edmonton, AB — March 2024 - Present

- Building a web application using Django and React frameworks for translating languages on VSCode
- Constructing a Transformer model for language translation using Python and Tensorflow library
- Training the model, fine-tuning hyperparameters and building an inference model to optimize calculation speed
- Designing a RESTful API with Django REST Framework to handle the language translation
- Implementing interactive user interface using React and React Bootstrap with Node.js

- Deploying the website with Azure App Services following DevOps methodologies and version control using Git and GitHub

Full Stack Developer | Self-employment
Edmonton, AB January 2024 - February 2024

- Developed a personal website using Python with Django framework on VSCode
- Designed interactive user interface with CSS and HTML with Bootstrap framework
- Created animations for web components using JavaScript
- Applied DevOps methodology on software deployment and practiced version control with 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 the performance and reliability of the program

Machine Learning Developer | FPT University
Hanoi, Vietnam October 2020

- Built a human face identification and recognition pipeline with YOLOv3 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