

An (Abel) Le

lequyan2003@gmail.com | (813) 709 – 0596 | Tampa, FL
www.linkedin.com/in/bluenopink | www.github.com/lequyan2003

EDUCATION

University of South Florida, College of Engineering
MS in Computer Science (GPA: 4.0)

Tampa, FL | Expected May 2027

- **Relevant courses:** Natural Language Processing, Introduction to Artificial Intelligence, Operating System, Software Engineering, Database Design, Secure Coding, Analysis of Algorithms, Data Structures, Program Design, Programming Concepts, Computer Architecture, Probability&Statistics, Calculus, Linear Algebra.

WORK EXPERIENCE

Research Assistant, CSAIL Lab, University of South Florida, Tampa, FL

June 2023 - Present

- Decoupled structural topology from node attributes by engineering **Struct-G**, a dual-stream pretraining framework utilizing **Random Walk Structural Signatures (RWSS)** and an **adaptive feature-wise gating network** to capture high-order graph connectivity.
- Synchronized transferable invariants across heterogeneous graph domains by jointly optimizing four self-supervised pretext tasks - **link prediction, node classification, feature reconstruction, and structural alignment** - surpassing SOTA baselines in zero-shot task adaptation by **15%**.
- Discretized Sarasota municipal crime data into a **spatiotemporal grid-graph**, stacking **Temporal Graph Convolutional Networks (T-GCN)** with **Attention-based GRUs** to model crime contagion effects and reduce **Mean Absolute Error (MAE)** by **22%** compared to traditional baselines.

Fullstack Software Engineer Intern, getbismart.com, Irvine, CA

May – August 2025

- Normalized relational schemas in **PostgreSQL** to manage high-dimensional telemetry data from integrated gaming apps, implementing **B-tree indexing** that accelerated analytical query execution by **42%**.
- Refactored the backend service layer using **Node.js**, implementing **Asynchronous I/O** and optimized worker threads to process user-game data streams **2.5x faster** for real-time AI-driven churn and engagement analysis.

AI Intern, EASTGATE SOFTWARE, Hanoi, Vietnam

April – June 2022

- Conducted comprehensive model evaluations using cross-validation and hyperparameter tuning techniques to optimize performance metrics such as accuracy, precision, and recall.
- Implemented transfer learning strategies to adapt pre-trained models to specific tasks and domains, achieving significant improvements in performance and efficiency.

PROJECTS

Text Summarizer

Pytorch, FastAPI, Docker, AWS (ECR, EC2), GitHub Actions, Hugging Face Transformers

- Developed a data pipeline to preprocess and store over **15,000+** text samples, leveraging SQL and AWS to optimize storage and retrieval performance.
- Deployed the application on AWS EC2 with Docker, pushed the Docker image to AWS ECR, and automated deployment processes using CI/CD pipelines via GitHub Actions.
- Processed and prepared **15,369 dialogues** from the SAMSum dataset, employing tokenization and data augmentation techniques for model training.
- Created a user-friendly web application with FastAPI to input text and generate summaries, integrated with the model and publicly accessible on AWS EC2.

Chest Cancer Classifier

Tensorflow, Pandas, Numpy, SciPy, Flask, DVC, MLflow

- Built a structured data pipeline for medical image processing, using DVC for versioning, SQL for structured metadata storage, and MLflow for experiment tracking.
- Improved model performance with data preprocessing (normalization, resizing) and augmentation (rotation, zoom, horizontal flipping), achieving **85% accuracy** and **90% recall**.
- Deployed a scalable Flask API for real-time X-ray data processing, integrating AWS S3 for secure cloud storage and retrieval; implemented a CI/CD pipeline with GitHub Actions, Docker, and AWS, reducing deployment time by **50%**.

TECHNICAL SKILLS, ACHIEVEMENTS & PUBLICATIONS

- **Quy An Le**, et al. "Struct-G: Structural-Aware Pretraining for Graph and Task Transfer Learning." *Under Review: International Conference on Learning Representations (ICLR)*, 2026.
- **Programming Languages:** Python, Java, JavaScript, Typescript, HTML5/CSS3, Rust, SQL
- **Web Development & Databases:** React.js, Next.js, Node.js, Express.js, Flask, FastAPI, GraphQL, Firebase, Sass, Tailwind CSS, Webpack, Redux, Leptos, PostgreSQL, SQLAlchemy, NoSQL (MongoDB)
- **Data Science & Machine Learning:** Pandas, NumPy, Matplotlib, Seaborn, scikit-learn, Pytorch, TensorFlow, Keras, Large Language Models (LLMs), OpenCV, MLflow, DVC, ETL Pipelines
- **Cloud & DevOps:** AWS (EC2, VPC, IAM, ECR), Docker, CI/CD (GitHub Actions), Git, Agile Methodologies
- **Third Prize** at Hackabull 2022