Nguyen Bui

(+1) 000-000-0000 | buibaogianguyen2008@gmail.com | https://www.linkedin.com/in/nguyen-bui-9355a1335/ | github.com/buibaogianguyen | nguyenbui.dev

EDUCATION

University of Central Florida — Orlando, Florida
Bachelor of Science in Computer Science; Transferred, GPA not yet established — *Aug. 2025 – Dec. 2027 (Expected)*

Florida International University — Miami, Florida
Bachelor of Science in Computer Science; GPA: 3.93 — *Aug. 2024 – April 2025*

EXPERIENCE

Data Science and AI Intern — April 2025 – Present
RikkeiSoft — *Remote*
- Designed ML/DL pipelines for regression, classification, and clustering, achieving up to 90% predictive accuracy on business oriented data; optimized model performance using gradient descent and backpropagation, enabling real-time inference on large-scale datasets.
- Implemented end-to-end data pipelines, preprocessing and data cleaning in Pandas/OpenCV to remove erroneous entries by 30%; designed and optimized SQL queries in MSS for efficient relational data management.
- Analyzed and visualized datasets with Pandas, Seaborn, and Matplotlib; applied Scikit-learn and OpenCV for feature extraction and ML modeling, reducing data preprocessing time by 15%.

Software Development Intern - Game Development — Jun. 2024 – Aug. 2024
FPT Software — *Ho Chi Minh City, Vietnam*
- Designed and implemented core game systems and mechanics in Unity using C#, covering physics, post-processing, texture and lighting optimization, input handling, collision, animation, and intuitive UI/UX interfaces.
- Improved performance through 2D/3D assets, object pooling, and shaders, reducing load times by 40%.

PROJECTS

ClearChat
PyTorch, Flask, HTML, CSS, JavaScript, Twitch/YouTube API, AWS EC2/S3 — August 2025 – Present
- Developed and deployed a transformer-based NLP model to detect hate speech in Twitch/YouTube live chats with a 98% accuracy. Optimized pipelines to run on CUDA-enabled PyTorch, achieving real-time predictions.
- Integrated platform APIs to flag, delete messages, and mute or ban users, with moderation control.
- Implemented a frontend UI and a real-time monitoring dashboard to visualize flagged content for evaluation.
- Deployed the model on AWS to enable scalable chat moderation; developing a frontend webpage for public access.

Vision Transformers for Skin Cancer Prediction and Classification
PyTorch, TorchVision, FastAPI, SQLAlchemy, Pandas, NumPy, PostgreSQL — August 2025 – Present
- Developing a REST API for skin lesion classification using FastAPI, PyTorch, and SQLAlchemy, including model inference, preprocessing, and database storage.
- Implemented data augmentation and oversampling to address ISIC 2019's highly imbalanced dataset, achieving an 83% accuracy from scratch after only 30 epochs.
- Utilized PostgreSQL to store and analyze database results after inference for downstream analysis.
- Optimized preprocessing, training and inference pipeline to run on GPU, enabling real-time prediction requests.

Snake Game DQN and PPO Agents Reinforcement Learning
Python, PyGame, TensorFlow, Keras, NumPy — July 2025 – September 2025
- Implemented a Snake game environment in PyGame (10×10 grid) to serve as a reinforcement learning testbed.
- Trained Deep-Q Network (DQN) and Proximal Policy Optimization (PPO) agents in TensorFlow using epsilon-greedy exploration and actor–critic methods. Achieved stable learning behavior within $\sim$10 episodes.

TECHNICAL SKILLS

Languages: Java, Python, C, C++, C#, SQL, JavaScript, HTML/CSS
Frameworks: PyTorch, TensorFlow, Flask, Tailwind CSS
Developer Tools: Git, Kaggle, Hugging Face, VS Code, Conda, Jupyter Notebook, Unity, IntelliJ, AWS, Azure
Databases: MySQL, Microsoft SQL Server (MSS), PostgreSQL
Libraries: React.js, Pandas, NumPy, Matplotlib, OpenCV, timm, Seaborn, TorchVision