Tu Linh Ha Nguyen

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EDUCATION

Virginia Tech **Expected Graduation May 2028**

BS, General Engineering intended: Computer Science

Blacksburg, VA

Relevant Courses: Introduction to Software Design | Introduction to Linear Algebra

TECHNICAL SKILLS

Programming Languages: C++, Java, MATLAB, Python, HTML

Tools/Frameworks: PyTorch, TensorFlow, Git, Flask

WORK EXPERIENCE

Technical Intern, Kidscode Stem **November 2022 – June 2024**

- Assisted teaching robotics and programming classes.
- Assisted organizing provincial robotics competition.
- Provided STEM outreach to students and teachers in poor regions in the Northen Vietnam through programming sessions.

PERSONAL PROJECTS

Facebook And Tesla Stock Price Predictions **November 2024**

- Used open datasets of Facebook and Tesla stock price on Kaggle for training and testing the models.
- Utilized pandas for data preprocessing and matplotlib for data visualization.
- Utilized PyTorch framework with long short-term memory (LSTM) recurrent neural network to train models that can predict stock prices using the stock prices from 7 previous days with an average validation loss of 0.00019.

AI Math Application **October 2024 – November 2024**

- Developed a full-stack demo application where users can register, login, choose math topics they want to learn, and take practice questions, …
- Utilized PyTorch framework to train a model that bases on grades, exam time, study time, to evaluate student's weaknesses of a specific math topic.
- Utilized OpenAI API and Google API for searching supplemental materials for students.

AI Planer Application (Hackathon Project) **September 2024**

- Developed a full-stack demo AI application where AI can generate a detailed trip plan for users based on their personal requests, preferences, and budget amount.
- Utilized OpenAI language model to process requests in natural language of the users and queried through databases for information about accommodations, flights, and attractions, …

ACTIVITIES

Participant, Virginia Tech Codefest 2024 **October 2024**

- Used pandas, seaborn, and matplotlib to visualize the database about traveling after COVID.
- Used HTML, CSS, and Flask to design the front-end of the website.
- Used Python to process the data in JSON format and display it on the website.
- Used Jinja2 to integrate the front-end and the back-end of the website.

Robotics Team Leader, VexV5 Team **August 2023 – February 2024**

- Managed and led a team of 6 members for 6 months to prepare for a robotics competition.
- Used Python programming the autonomous part of the robot.
- Pioneered in the use of calculus formula in replacement for the Giro sensor.
- Led meetings diving into the game's objects, targets, and strategies.

National Robotics Competition Organizing Committee Member **April 2023 – October 2023**

- Designed the programming challenges and rules for the competition.
- Designed programming tasks regarding maze-solving problems with the use of maze-solving algorithms.
- Ran Webinars for the competition.
- Evaluated applicants for the first round and participants' works in the final round.

Hackathon Team Leader, SteamHacks Competition **July 2023**

- Managed and led a team of 4 members during the hackathon period.
- Developed a project in using computer vision to identify fake products.

- Used HTML, CSS, Jinja2, and Flask to design the front-end of the website.
- Used Python and a pre-trained classification model from the Teachable Machine website for the back-end of the website.
- Used ChatGPT API to create a chatbot on the website.

CERTIFICATIONS

DeepLearning.AI - Supervised Machine Learning: Regression and Classification **February 2024**
University of Pennsylvania - Introduction to Java and Object-Oriented Programming **January 2024**

ORGANIZATIONS

Kidscode STEM **November 2022 – June 2024**
AzureAms Programming Club **August 2022 – May 2023**