

# Thanh Le

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## EDUCATION

Master of Science in Computer Science, University of Houston - Downtown August 2023 - Expected December 2024

- **Specialized in Machine Learning and Artificial Intelligence**
- GPA: 3.7
- Relevant Coursework: Advanced AI, Ethics of AI, Advanced Machine Learning, Deep Learning, Statistics for Science, Robotics.

AWS Certified Solutions Architect - Associate (AWS SAA - C03) December 2023

- Issuing Authority: Amazon Web Services (AWS)

Bachelor of Science in Computer Science, University of Houston August 2019 - May 2021

- **Minor in Data Science and Mathematics of Science**
- GPA: 3.7
- Relevant Coursework: Data Science, Advanced Data Science, Statistics of Science, Advanced Data Structures and Algorithms.

## HIGHLIGHT PROJECTS

### Machine Translation English to French

- Built an application to translate sentences from English to French.
- Efficiently processed and analyzed a large dataset (1GB) of parallel English and French sentences using **Pandas, Sklearn, NLP techniques** such as tokenized, word2vec.
- Designed and implemented a Seq2Seq with **Long-Short-Term Memory** and the transformation of a sequence of sentences with Encoder in English and Decoder in French to train models achieving accuracy 90%.

### Hierarchical automated machine learning (AutoML) - McMurray/Wabiskaw Oil Sands Deposit

- Collaborated with teammates to develop **Machine Learning models** and deployed to **AWS Cloud** for predicting elemental composition in oil sands, aiding mineral extraction processes.
- Pre-processed and analyzed 3000 well-logged files using **Python, Pandas, Scikit-learn, Seaborn, Matplotlib, and H2O AutoML**.
- Experimented with **Classification, Regression, XGBoost, and AutoML techniques**.
- Improved prediction accuracy from 85% to 96%, potentially reducing extraction costs and environmental impact.

## EXPERIENCE

Software Engineer Intern October 2023 - January 2024

ISODS Massachusetts

- Spearheaded abnormal detection applications with **Django, Bootstrap** combined with **AWS Cloud Services** such as **Beanstalk, Lambda, Kubernetes**.
- Successfully deployed an advanced AI-based proctoring system, which streamlined the exam monitoring process by use of **YOLOv8 object detection**, combined with **TensorFlow and OpenCV**, revolutionized the way examinations were supervised online.
- Pre-processed and utilized the custom datasets of 2000 images, achieving an accuracy of 85%.
- Integrated **Caffe and DNN models** to enhance accuracy, demonstrating proficiency in diverse frameworks and libraries.
- Reduced manual monitoring by 40%, cutting operational costs, and decreased cheating incidents by 50%, boosting the integrity and trustworthiness of online examinations.

Software Engineering and Programming Specialist September 2022 - September 2023

BAYLOR COLLEGE OF MEDICINE Houston, TX

- Translated user's stories into code functionalities and delivered in-house applications.
- Developed **full-stack web applications** with a tech stack comprising **C#, JavaScript, CSS, Bootstrap, ASP.NET, SQL Server, and Oracle**.
- Built an AI-powered healthcare analytics platform, improving patient/doctor analyses and medical prediction accuracy by 60%, and reducing analysis time by 75% using **Machine Learning techniques, Supervised and Unsupervised Learning, Power BI, and Tableau**.
- Successfully migrated an old system from .NET to a newer version of ASP.NET, achieving a 60% reduction in delay time when processing large datasets.

Software Engineer I August 2021 - September 2022

ACCREDITO PACKAGING INC. Houston, TX

- Led the development of an automation application using **Python frameworks, Flask, Django, Bootstrap, PostgreSQL, OpenCV, and TensorFlow** to streamline production processes and defect detection.
- Achieved a 10% reduction in material waste and a 15% increase in production efficiency.

## ACADEMIC EXPERIENCE

Graduate Teaching Assistant January 2024 - Present

University of Houston - Downtown

- Tutor and support undergraduate students in mathematics, **probability and statistics for science**, Python data structures and algorithms, **data science**.

## SKILLS

Python (Proficient), C# (Intermediate Mid), Prolog AI Programming, JavaScript, Django, Flask, ASP. NET, AWS Cloud, Machine Learning - AI libraries, Linux, Kubernetes, Docker, Jenkins.