



Thong Minh Lai (Tom)

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Huddersfield, United Kingdom

OBJECTIVE

Enthusiastic and skilled in AI, Machine Learning, Deep Learning, Neural Networks, and various models and domains, with 2 years of experience in Python, C++ and Octave (MATLAB). I am seeking opportunities to leverage my expertise and contribute to innovative projects in AI and practical problem-solving in related fields

SKILLS

- **Programming Languages:** Python, C++, Java, MATLAB/Octave
- **AI & Machine Learning:** Neural Networks, Deep Learning, Computer Vision, NLP, YOLOv9, Support Vector Classification (SVC)
- **Data Science & Analytics:** Descriptive Statistics, EDA, PCA, Outlier Detection, Data Visualization (Matplotlib, Seaborn, Tableau)
- **Machine Learning Libraries:** TensorFlow, PyTorch, Scikit-learn, NumPy, Pandas
- **Cloud & Development Tools:** AWS, Azure, Git, GitHub, Docker
- **Database Systems:** SQL, Relational Databases, Database Management Systems
- **Web Development:** HTML5, CSS3, JavaScript, React.js, Node.js, Bootstrap, MongoDB, Django, Flask, Responsive Design, Web Security, API Integration, Git/GitHub Pages, AWS Deployment
- **Mathematical Foundations:** Linear Algebra, Calculus, Statistics, Probabilities, Discrete Mathematics
- **Research Skills:** Data Analysis, Academic Writing, Literature Review, Scientific Documentation
- **Soft Skills:** Leadership, Project Management, Team Collaboration, Problem Solving

EXPERIENCE

- **Learnspot** June 2024 - September 2024
AI Software Engineer - Summer Intern Hybrid - London
 - Designed and implemented a customer service Chatbot using Prompt Engineering with the OpenAI API
 - Integrated the Moderation API to ensure safe and appropriate interactions
 - Employed Chain-of-Thought prompting to enhance the chatbot's reasoning capabilities
 - Implemented evaluation techniques to minimize response leakage and hallucination
 - Developed an AI tutor chat feature to assist students with their questions and assignments, providing real-time support and guidance

EDUCATION

- **University of Huddersfield** September 2022 - Present
BSc (Hons) Computer Science with Artificial Intelligence SW Huddersfield, United Kingdom
 - First-year Overall Grade: 93.125% | Second-year Overall Grade: 92.8%
 - Key Modules: Computer Network Fundamentals (100%), Introduction to AI (93%), Algorithm and Data Structures (94%), Computational Mathematics (100%)
- **Ho Chi Minh University of Science - Vietnam National University** October 2020 - September 2022
BSc Information Technology Ho Chi Minh City, Vietnam
 - GPA: 3.7/4.0
 - Received Honor Scholarship for Excellent Academic Student

PUBLICATIONS AND TECHNICAL REPORTS


T=TECHNICAL REPORT, P=PROJECT PROPOSAL

- [P.1] Lai, M. T. (2025). **Explainable AI (XAI) in Deep Learning Models for Credit Card Fraud Detection**. Project Thesis, University of Huddersfield. Supervisor: Prof. Hyunkook Lee
- [T.2] Lai, M. T. (2025). **Parallel Computer Architecture Clusters and Grids Benchmarking**. Technical Report, University of Huddersfield. Supervisor: Prof. Hamza Aagela
- [T.1] Lai, M. T. (2024). **LearnSpot: Implementing Advanced Prompting Techniques for AI Chat Systems**. Technical Report, Learnspot AI
- [T.2] Lai, M. T. (2024). **Investment Allocation Analysis: A Machine Learning Approach**. Technical Report, McGill-FIAM Asset Management Hackathon

PROJECTS

- **Explainable AI (XAI) in Deep Learning Models for Credit Card Fraud Detection**

Tools: Deep Learning, SHAP, LIME, Anchors, TensorFlow, Scikit-learn

[Supervisor: Prof. Hyunkook Lee 


◦ Integrated XAI methods (SHAP, LIME, Anchors) to provide explanations for Deep Learning model predictions.

◦ Evaluated explainability using XAI metrics (Faithfulness, Monotonicity, and Completeness) in confidence levels.

◦ Compared XAI outputs across models (CNN, LSTM) to identify strengths and limitations for different user needs.

◦ Delivered actionable explanations to support regulatory compliance and stakeholder trust in AI-driven decisions.

October 2024 - Present

[Academic Poster] 
- **McGill-FIAM Asset Management Hackathon: Investment Allocation**

Tools: Machine Learning, Big Data Analytics, Financial Analysis

◦ Collaborated with finance specialists as Machine Learning Specialist to develop portfolio trading strategies



◦ Implemented ML methods for portfolio optimisation and stock selection

◦ Developed models to identify key financial factors for stock performance prediction

◦ Conducted back-testing to validate portfolio performance using historical data

◦ Our strategy delivered over 7500% return from 2010 to 2024, far surpassing the S&P 500

September 2024 - October 2024

[Report ] 
- **Work It: Exercise Recommender System**

Tools: Filtering Collaboration, Web Development, User Feedback Analysis



◦ Developed recommender system using Filtering Collaboration to suggest 10 personalised exercises

◦ Implemented online batch updates for continuous model improvement based on user feedback

◦ Integrated PLESI considerations for privacy, legal compliance, and inclusivity

◦ Designed system architecture focusing on gender-inclusive exercise recommendations

January 2024 - Present

[Demo ] 
- **Eye-tracking in Reading Comprehension: Anomaly Detection**

Tools: Local Outlier Factor (LOF), Data Analysis, Python



◦ Developed Anomaly Detection mechanism using Local Outlier Factor for eye-tracking dataset

◦ Analysed 20+ features related to readers' eye movements, fixations, and directions

◦ Support PhD researcher Minh Huyen Nguyen to categorise fixations into "First Pass" and "Second Pass" sequences

◦ Improved 11.25% data analysis accuracy through systematic outlier removal and feature engineering

October 2023 - December 2023

[Reference ] 


HONOURS AND AWARDS

- **Outstanding Leadership Award**

University of Huddersfield International Office

◦ Led and managed the Vietnamese Society as President, demonstrating exceptional leadership skills

◦ Successfully managed social media platforms achieving 2.2k+ Facebook likes and active Instagram engagement


◦ Recognised by International Office for impactful community leadership and cultural integration initiatives 

February 2023
- **Academic Excellence Awards**

University of Huddersfield


◦ Maintained an overall grade of over 92% in both years


◦ Achieved perfect scores (100%) in Computer Network Fundamentals and Computational Mathematics


◦ Received Merit-based Scholarship for Outstanding Academic Performance 

2022 - 2024
- **Professional Certifications**

DeepLearning.AI, IBM, Stanford University

◦ Completed Deep Learning Specialization and NLP Specialization from DeepLearning.AI 

◦ Earned Cloud Computing certification from IBM 

◦ Completed Writing in the Sciences course from Stanford University 

2023 - 2024
- **Previous Academic Achievements**

Ho Chi Minh University of Science & High School

◦ Received Honor Scholarship for Excellent Academic Student at HCMUS

◦ Bronze Medal in Mathematics at Excellent Student Olympic Competition

◦ Demonstrated exceptional problem-solving skills in competitive mathematics

2020 - 2022

ADDITIONAL INFORMATION

Languages: English (Professional), Vietnamese (Native), Chinese (Basic)
Technical Writing: Scientific documentation, research papers, technical blogs
Interests:

- Any AI Fields: Fraud Detection, Computer Vision, Natural Language Processing, Generative AI
 - Financial Technology: Investment Analysis, Trading Strategies
 - Cultural Exchange: International student community, cross-cultural communication
 - Sports: Badminton (Captain of University Badminton Team)
- Personal Website:** [Portfolio and Technical Blog](#)

REFERENCES

1. **Prof. Hyunkook Lee**
Professor of Music Technology
Department of Computing and Engineering
University of Huddersfield
Email: H.Lee@hud.ac.uk

Relationship: Final Year Project Supervisor
2. **Dr. Ilias Tachmazidis**
Senior Lecturer
Department of Computing and Engineering
University of Huddersfield
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Relationship: Academic Advisor
3. **Dr. Muhammad Ansari**
Senior Lecturer
Department of Computing and Engineering
University of Huddersfield
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Relationship: Course Lecturer
4. **Dr. Dinh Ba Tien**
Senior Lecturer
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Ho Chi Minh University of Science
Email: dbtien@fit.hcmus.edu.vn
Relationship: Former Academic Advisor

Additional references available upon request.