Joe (Anh) NGUYEN

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EDUCATION

2025-2028	PhD. in ARTIFICIAL INTELLIGENCE at Oregon State University. Working on language agents.
2022-2025	Msc. in ARTIFICIAL INTELLIGENCE at Oregon State University. **GPA**: 3.96 / 4.0. Thesis: Language-conditioned world models improve policy generalization in dynamics-descriptive language understanding tasks
AUG 2014- AUG 2019	B.S in Computer Science at HCM University of Science, Vietnam National University. Thesis: BERT for extractive summarization in long documents. **GPA**: 3.81 / 4.0 (Top 5%)

RESEARCH EXPERIENCES

JULY 2023-CURRENT	**Research Assistant in Langue agents, at Oregon State University, with Prof Stefan Lee.** • Develop a agent that can understand language descriptions of environments and generalize over new language and environment dynamics: state-of-the-art over existing methods Dynalang, EMMA, LWM. [1]
MAR 2022-SEP 2023	**Research Assistant in Multimodal, at Oregon State University, with Prof Stefan Lee.** • Collect new data in referring expressions for underwater objects • Compare and analyze results from the state-of-the-art methods in referring expressions: OFA and CLIP model under this new dataset. • Results suggest that OFA and CLIP both have low accuracy performance on underwater objects that are rare in territorial settings.
NOV 2019-NOV 2021	**Research Engineer in Multimodal at Sing. Management University, with Prof Jiang Jing** • Build the modified version of CLEVR and Ref-Reasoning where referring expressions are ambiguous (referring to multiple objects) • Develop a method that can raise new questions to the user to clarify ambiguously visual questions based on parsed modules (neural module network)
JAN-JUNE 2018	**Research intern in NLP at Singapore University of Technology and Design, with Professor Lu Wei** • Build a new dataset for dense Visual Semantic Role Labelling (multiple actions per image) from Visual Genome dataset & proposing annotation pipeline • Constituency parsing: incorporate early parsing on Recurrent Neural Network grammar
JUNE-SEP 2017	**Research Intern in NLP at Knorex Vietnam:** • Build dataset and deep learning models to solve Brand Safety problem, i.e. classify bad content categories in text such as Adults, Death & tragedy, violence, etc: overall 93% F1 • Build image data and image classifier for Brand Safety problem - overall 95% F1 • Implement an improved version of Click-through rate model, improved 10% AUC to previous model of the company

COURSEWORK PROJECTS

- **Exploration in RL**: Compare different exploration strategies in model-based RL: count-based, curiosity-based and Monte-Carlo dropout in PointMaze

- **Search in Games (Sudoku and (M,N,K))**: Compare different tree search in Sodoku and (M,N,K) game: Monte-Carlo Tree Search, A* and Minimax with Alpha-Beta prunning.

PUBLICATIONS

1. Anh (Joe) Nguyen, Stefan Lee *Language-conditioned world model improves policy generalization by reading environmental descriptions*, accepted at Bridging Language, Agent, and World Models workshop at NeurIPS2025.

2. Duy Phung, Tu Minh, Anh Nguyen, Tien Dinh, *"DTA Hunter System: A new statistic-based framework of predicting future demand for taxi drivers"*, accepted for presentation @ SoICT 2017 (The Eighth International Symposium on Information and Communication Technology)

Awards and academic Activities

Year	
2022	Vietnam Education Foundation (VEF) 2.0 recommended candidate for Ph.D programs in the USA (reviewed by Professor Trac D. Tran - Johns Hopkins University)
2019	Fully funded exchange at Taipei APEC Forum on Digital Innovation and Entrepreneurship (Taiwan)
2019	Fully funded exchange at GKS ASEAN SCIENCE at Kyungwoon University (Korea)
2019	Fully funded exchange at Korea Advanced Institute of Science and Technology Electrical Engineering
2019	Fully funded exchange at Southeast Asia Machine Learning School
2019	Scholarship from Shinhan Bank for excellent students
2017	Scholarship from American Chamber of Commerce Vietnam for excellent students
2017	Scholarship from Global Cybersoft for excellent students
2017	Scholarship from Esilicon Vietnam for excellent students
2016	ACM-ICPC Vietnam National competitive programming contest: Third Prize
2016	HCMc University of Science Olympiad in Informatics : Honorable mention
2013	Vietnam Olympiad in Informatics for High-school Student: Honorable Mention

Teaching Assistant Experiences

- Introduction to Machine Learning (graduate) (2023)

- Introduction to Machine Learning (undergrad) (2023)

- Introduction to Programming Language (undergrad) (2022)

- Computer Science Capstone (undergrad) (2023)

References

1. **Professor Stefan Lee**
   Electrical Engineering & Computer Science, Oregon State University
   Email: leestef@oregonstate.edu

2. **Professor Jing Jiang**
   School of Information Systems, Singapore Mangement University, Singapore
   Email: jingjiang@smu.edu.sg

3. **Professor Trac D. Tran**
   Electrical and Computer Engineering, Whiting School of Engineering, Johns Hopkins University
   Email: trac-tran@vef2.org

4. **Dr. Nghiem Quoc Minh**
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