

Duc M. Nguyen

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Education

George Mason University, Ph.D. in Computer Science	Aug 2022 – Now
George Mason University, M.S. in Computer Science	Aug 2022 – Dec 2024
Miami University, B.S. in Computer Science	Aug 2018 – May 2022
• Minor in Statistics	GPA: 3.75/4.0

Experience

Technical Lead, Google Developer Group – Fairfax, VA	Oct 2024 – Now
• Plan yearly technical events for Google at George Mason University.	
• Lead workshops and projects for GMU students to learn Google Cloud Technology.	
Research Assistant, RobotiXX Lab – Fairfax, VA	Aug 2022 – Now
• Build <i>Task and Motion Planning</i> pipeline for household robots.	
• Implement navigation and manipulation interface for mobile manipulators like Fetch and Spot using ROS.	
Research Assistant, Department of Electrical Engineering – Oxford, OH	Aug 2020 – Dec 2021
• Implemented Deep Reinforcement Learning to optimally control Unmanned Aerial Vehicles (UAVs) in group.	
• Developed a Python simulation enabling feedback from ground-based users for UAV system.	
Research Assistant, DACHB Lab – Oxford, OH	May 2020 – Aug 2020
• Achieved 90% accuracy in classifying suicide attempts and ideations using machine learning models.	
• Mapped 361 suicide-related concepts with 946 interrelationships with NetworkX.	
• Built an interactive graph with JavaScript and Python to visualize causal relationships.	

Publications

Anticipatory Task and Motion Planning [\[PDF\]](#)

Roshan Dhakal, *Duc M. Nguyen*, Tom Silver, Xuesu Xiao, Gregory J. Stein

Human Uncertainty-Aware MPC for Enhanced Human-Robot Collaborative Manipulation [\[PDF\]](#)

Al Jaber Mahmud, *Duc M. Nguyen*, Filipe Veiga, Xuesu Xiao, Xuan Wang
IEEE 7th International Conference on Industrial Cyber-Physical Systems (ICPS), 2024

Toward Human-Like Social Robot Navigation: A Large-Scale, Multi-Modal, Social Human Navigation Dataset [\[PDF\]](#)

Duc M. Nguyen, Mohammad Nazeri, Amirrera Payandeh, Aniket Datar, Xuesu Xiao
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2023

Responsive Regulation of Dynamic UAV Communication Networks Based on Deep Reinforcement Learning

R. Zhang, *Duc M. Nguyen*, M. Wang, L. X. Cai, X. Shen
Broadband Communications, Computing, and Control for Ubiquitous Intelligence. Wireless Networks. Springer, 2022

Mapping the Complexity of Suicide by Combining Participatory Modeling and Network Science [\[PDF\]](#)

Phillipe J. Giabbanelli, Michael C. Galgoczy, *Duc M. Nguyen*, Romain Foy, Ketra L. Rice, Nisha Nataraj, Margaret M. Brown, Christopher R. Harper
IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, 2021

Awards and Services

Finalist for Best Paper Award

AAAI Fall Symposium Artificial Intelligence for Human-Robot Interaction (AI-HRI), 2023

Journal/Conference Reviewer: ICRA, IEEE RA-L, AAAI AI-HRI, American Control Conference.