# Hai Nguyen

# Northeastern University

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#### **EDUCATION**

Northeastern University (NEU), USA 2019 - Present

Doctor of Philosophy in Computer Science

Supervisors: Prof. Robert Platt, Prof. Christopher Amato

University of Southampton (UoS), UK 2016-2017

Master of Science in Unmanned Aircraft Systems Design

Hanoi University of Science and Technology (HUST), Vietnam 2007-2012

Bachelor of Science in Control and Automation Engineering

#### WORK EXPERIENCES

Embedded Software Engineer, Viettel Aerospace Institute, Vietnam

2012-2016 & 2017-2018

#### RESEARCH INTERESTS

My research focuses on uncertainty modeling, reinforcement learning, and their applications to robot manipulation. I aim to build compact and robust models of the world to decision making under partial observability.

### SELECTED PUBLICATIONS

Hai Nguyen\*, Zhihan Yang\*, Andrea Baisero, Xiao Ma, Robert Platt, Christopher Amato. "Hierarchical Reinforcement Learning under Mixed Observability", The 15th International Workshop on the Algorithmic Foundations of Robotics (WAFR), 2022

Zhihan Yang\*, Hai Nguyen\*. "Recurrent Off-policy Baselines for Memory-based Continuous Control", NeurIPS: Deep Reinforcement Learning Workshop, 2021

Hai Nguyen\*, Brett Daley\*, Xinchao Song, Christopher Amato, Robert Platt. "Belief-Grounded Networks for Accelerated Robot Learning under Partial Observability", The 4nd Conference on Robot Learning (CoRL), 2020

Hoang-Dung Bui\*, Hai Nguyen\*, Hung Manh La, Shuai Li. "A deep learning-based autonomous robot manipulator for sorting application", The Fourth IEEE International Conference on Robotic Computing (IRC), 2020

Hai Nguyen, Hung La. "Review of deep reinforcement learning for robot manipulation", The 3rd IEEE International Conference on Robotic Computing (IRC), 2019

Hai Nguyen, Hung La. "Deep reinforcement learning using genetic algorithm for parameter optimization", The 3rd IEEE International Conference on Robotic Computing (IRC), 2019

#### **AWARDS**

Chevening Scholarship, British Foreign and Commonwealth Office (2% acceptance rate)	2016
IMechE UAS 2016 Challenge - Runner-up	2017
IMechE UAS 2016 Challenge - Navigation Accuracy Award	2017
Graduate Dean's Merit Scholarship, University of Nevada, Reno (\$10,000)	2018
Travel & Acommondation Scholarship, Southeast Asia Machine Learning School (SEAML)	2019

## PROFESSIONAL ACTIVITIES

#### Reviewer

- Conferences: ICRA (2021), IROS (2022)
- Journals: RA-L (2022)