## Dao Anh Nhat Nguyen

#### **Career Overview**

PhD student at the University of Adelaide, with research focusing on *Multi-Agent Sequential Decision Making, Planning under Uncertainty*, and *Monte-Carlo Tree Search*. First author of multiple academic publications and a parallelised and distributed implementation of tree search algorithms for multi-agent systems in Python.

#### Education

#### The University of Adelaide

Ph.D. in Computer Science - Supervisors: Hung Nguyen, Duong Nguyen & Junae Kim

- Developed a parallelised and distributed implementation of decentralised Monte Carlo Tree Search algorithms for multi-agent systems in Python
- Published papers on state-of-the-art decentralised Monte Carlo Tree Search methods at ECAI and IEEE TMC
- Recipient of the University of Adelaide Research Scholarship

#### The University of Adelaide

#### B.Eng. in Computer Engineering (Honours)

- GPA: 6.563/7 First Class Honours
- Main courses: Computer Networks & Applications, Algorithm Design & Data Structures, Control

#### Ho Chi Minh City University of Technology

#### **B.Eng. in Electrical & Electronics Engineering**

- GPA: 8.44/10
- Main courses: Calculus, Linear Algebra, Universal Physics, Computer Engineering

#### **Publications**

#### Peer Reviewed

- N. Nguyen D. Nguyen, J. Kim, G. Rizzo, and H. Nguyen, "Decentralized Coordination for Multi-Agent Data Collection in Dynamics Environments," *IEEE Transaction on Mobile Computing*, vol. 23, no. 12, pp. 13963-13978, Dec. 2024. *Q1 Ranking, Impact Factor: 7.7.*
- N. Nguyen, D. Nguyen, G. Rizzo, and H. Nguyen, "United We Stand: Decentralized Multi-Agent Planning with Attrition," in *27th European Conference on Artificial Intelligence (ECAI)*. IOS Press, 2024, pp. 3421-3428. *Acceptance Rate: 23.34%*.
- N. Nguyen, D. Nguyen, J. Kim, G. Rizzo, and H. Nguyen, "Multi-Agent Data Collection in Non-Stationary Environments," in *IEEE 23rd International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM)*. IEEE, 2022, pp. 120–129. Acceptance Rate: 26.43%.

#### **Under Reviewed**

- N. Nguyen D. Nguyen, J. Kim, G. Rizzo, and H. Nguyen, "Survive and Thrive: Decentralized Multi-Agent Coordination under Attrition Risks".
- N. Nguyen D. Nguyen, G. Rizzo, and H. Nguyen, "Multi-Agent Monte Carlo Tree Search in Adversarially Skewed Environments".

#### Projects

## A Decentralised Combined and Hybrid Approach for Multi-agent Decision Making

May 2022 – July 2022

- Recipient of the Artificial Intelligence for Decision Making Initiative 2022
- Developed a decentralised planning algorithm combining Monte Carlo tree search and game-theoretic approaches for multi-agent

July 2018 – Sep 2020

April 2021 – Ongoing

August 2015 – Jan 2018

- Tools used: Python, NumPy, Pandas
  Behavioural Analytics of Mobile Applications

  Recipient of the Summer Research Scholarship at The University of Adelaide
  Developed a test bed for automated mobile traffic data generation and labelling
  Tools used: Python, Appium

  Using Machine Learning to Determine Deposit Height and Defects for Wire Arc August 2019 June 2020

  Manufacture
  Final Year Research Project at The University of Adelaide
  Performed statistical analysis and developed machine learning models to estimate deposit height and predict
- defects based on raw electrical welding data
- Tools used: Matlab, Python, SKLearn

#### Teaching

# The University of Adelaide - Teaching Assistant March 2022 – July 2024 • Courses: Object-Oriented Programming, Computer Networks & Applications, Algorithm Design & Data Structures

• Duties included: supervising weekly practical sessions, code reviewing and assessing undergraduate students

### Ho Chi Minh City University of Technology - Teaching AssistantSept 2017 – April 2018

- Courses: Engineering English
- Duties included: facilitating weekly sessions and tutoring undergraduate students

May 8, 2025 **Dao Anh Nhat Nguyen** Firma autografa sostituita a mezzo stampa ai sensi dell'art.3, comma 2, del D. Lgs. 39/1993 Dichiaro di:

- essere consapevole delle conseguenze derivanti da dichiarazioni mendaci, previste dal D.P.R. 28/12/2000 n. 445 e s.m.i., e che le informazioni riportate nel presente curriculum corrispondono a verità;
- essere informato/a, ai sensi e per gli effetti di cui al Regolamento UE 2016/679, che i dati personali contenuti nel presente curriculum saranno trattati dall'Università degli Studi di Foggia per adempiere agli obblighi di pubblicazione ai fini di trasparenza previsti dalla normativa vigente.