AN NGUYEN

https://ducan.co.uk Computer & Engineering Science Department, University of Oxford, United Kingdom CV updated June 2024

EDUCATION

University of Oxford, United Kingdom

• Doctor of Philosophy Program 2021 - now Research: Intelligent Decision Support Systems, Metacognition AI, Human-AI Joint Decision Making, Deep Reinforcement Learning, Decision Making under Uncertainty. Supervisors: Professor Nick Hawes.

Nagoya University, Japan

• Master of Science Program, Artificial Intelligence and Autonomous Systems. 2019 - 2021 Thesis: Imitation Learning for Replicating Human Driving Behavior. Supervisors: Professor Tatsuya Suzuki.

PUBLICATIONS

- 2HBT1: Two Heads Are Better Than One Domain Generalisation of Metacognition in Human-AI Collaboration.
 International Joint Conference on Artificial Intelligence (IJCAI), 2024 (submission)
 D. A. Nguyen, Raunak Bhattacharyya, Clara Colombatto, Steve Fleming, Nick Hawes.
- PRE: Vision-Language Prompt Learning with Reparameterisation Encoder. International Conference on Learning Representations (ICLR), 2024 (poster) Minh Anh Pham, <u>D. A. Nguyen</u>, Cephas Svosve, Vasileios Argyriou, Georgios Tzimiropoulos.
- Towards Intelligent Decision Support Systems in Robotics: Investigating the Role of Self-Confidence Calibration in Joint Decision-Making.
 Association for the Advancement of Artificial Intelligence (AAAI), 2024 (spotlight) Raunak Bhattacharyya, <u>D. A. Nguyen</u>, Clara Colombatto, Steve Fleming, Ingmar Posner, Nick Hawes.
- 5. Group Decision-Making in Robot Teleoperation.
 Robotics: Science and Systems (RSS), 2024 (submission)
 D. A. Nguyen, Raunak Bhattacharyya, Clara Colombatto, Steve Fleming, Nick Hawes.
- CTL Model Checking of MDPs over Distribution Spaces. Hybrid Systems: Computation and Control (HSCC), 2023 Yulong Gao, D. A. Nguyen, Karl H. Johansson, Alessandro Abate.
- CTL Model Checking of Markov Decision Processes over the Distribution Space Artifacts. Quantitative Evaluation of Systems (QEST), 2022
 D. A. Nguyen, Yulong Gao, Karl H. Johansson, Alessandro Abate.
- Modeling Car-Following Behavior in Downtown Area based on Unsupervised Clustering and Variable Selection Method.
 IEEE International Conference on Systems, Man, and Cybernetics (IEEE SMC), 2021
 D. A. Nguyen, J Nwadiuto, H Okuda, T Suzuki.
- Model Structure Identification of Hybrid Dynamical Systems based on Unsupervised Clustering and Variable Selection.
 International Federation of Automatic Control (IFAC), 2020
 D. A. Nguyen, J Nwadiuto, H Okuda, T Suzuki.

EXPERIENCE

Nagoya University

 $Graduate\ Student\ Researcher$

• Developed data-driven method to model human driving behavior for precise driving behavior planning and prediction.

ACADEMIC SERVICES

| Teaching at University of Oxford | |
|----------------------------------|-------------------------|
| Data Mining | Hilary 2024 |
| Algorithms and Data Structures | Michaelmas 2023 |
| Introduction to Deep Learning | Michaelmas 2023 |
| Reinforcement Learning | Michaelmas 2023, 2024 |
| AI Ethics | Michaelmas 2023 |
| Computer Graphic | Trinity 2022 |
| Internet of Things | Hilary 2022, 2023, 2024 |

| Automatica | 2023 |
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| International Conference on Intelligent Robots and Systems (IROS) | 2022 |
| International Conference on Control & Automation (ICCA) | 2022 |
| International Federation of Automatic Control (IFAC) | 2022 |
| Control of Complex Systems (COSY) | 2022 |
| International Conference on Formal Modeling and Analysis of Timed Systems (FORMATS) | 2022 |

Competition

Reviewer

Applied Verification for Continuous and Hybrid Systems (ARCH 2022)

SKILLS

| Areas of expertise: | Human-AI joint decision making, metacognitive intelligent decisions support systems, statistical analysis, LLMs machine learning, (deep) reinforcement learning. |
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| Programming | Python, C++, JavaScript, MATLAB. |
| Others | PyTorch,, TENSORFLOW, AWS S3, AWS EC2, DOCKER, MongoDB. |
| AWARDS | |

| MEXT Scholarship, Japanese Government | 2019 |
|---------------------------------------|------|
| JASSO Scholarship, JASSO Foundation | 2015 |