

# Daniel (Chee Hian) Tan

Personal site: <https://daniel-ch-tan.github.io/>

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## Education

SEP 2017 - SEP 2021

**Stanford University** – *B. Sc. Mathematical and Computational Sciences*

SEP 2022 - PRESENT

**University College London** – *M. Phil/PhD. Computer Science*

## Research Posts

JUL 2021 - AUG 2022

**Agency of Science, Technology, and Research, Singapore** – *Research Engineer*

- Supervised by Michael Meng Yee Chuah and Yau Wei Yun at Institute of Infocomm Research, Robotics and Autonomous Systems department
- Implemented reinforcement learning methods to train legged locomotion controllers
- Deployed said controllers to hardware and collected real-world data to improve system

## Publications

Daniel Chee Hian Tan\*, Jenny Zhang\*, Michael (Meng Yee) Chuah and Zhibin Li.

**Perceptive Locomotion with Controllable Pace and Natural Gait Transitions Over Uneven Terrains.** arXiv preprint <https://arxiv.org/abs/2301.10894>

Esin Darici Haritaoglu, Nicholas Rasmussen, Daniel C. H. Tan, Jennifer Ranjani J., Jaclyn Xiao, Gunvant Chaudhari, Akanksha Rajput, Praveen Govindan, Christian Canham, Wei Chen, Minami Yamaura, Laura Gomezjurado, Aaron Broukhim, Amil Khanzada, Mert Pilanci **Using Deep Learning with Large Aggregated Datasets for COVID-19 Classification from Cough.** arXiv preprint <https://arxiv.org/abs/2201.01669>

## Industry Experience

AUG 2022 - OCT 2022

**Virufy** – *MLOps Tech Lead*

- Supervised by Amil Khanzada, CEO. Volunteering on-and-off since Apr 2021
- Designed, developed, and maintained data processing pipelines to aggregate offline and streaming data into a single unified format and data store
- Developed pipeline to deploy trained model checkpoints as microservices to be used by the frontend application

- Worked closely with research team to iterate quickly on methods

JUN 2019 - DEC 2019

**GovTech, Singapore** – *Software Engineering Intern*

- Supervised by Leehong Lau, Tech Lead of Embedded Systems team.
- Developed a computer vision pipeline for crowd-counting to deploy on edge devices
- Experimented with multiple methods of compressing large vision models without losing performance

JUN 2019 - SEP 2019

**TripAdvisor, Boston** – *Software Engineering Intern*

- Implemented a ranking algorithm based on word features to maximize diversity of top results
- Developed a machine learning model to rank hotel listings based on predicted click-through rate

## Teaching

**University College London**

- COMP0188 Deep Representations and Learning, Autumn 2022
- COMP0233 Research Software Engineering in Python, Autumn 2022