

Curriculum Vitae

1. Personal Information

Name: Long Tran-Thanh
Date of birth: 8th December 1983
Place of birth: Hue City, Vietnam
Nationality: British, Hungarian, Vietnamese
Web site: https://warwick.ac.uk/fac/sci/dcs/people/long_tran-thanh/
Email: long.tran-thanh@warwick.ac.uk
Erdős number: 3 (Pál Erdős -> Imre Z. Ruzsa -> Sándor Molnár -> Long Tran-Thanh)
(Pál Erdős -> Ronald L. Graham -> Minming Li -> Long Tran-Thanh)

2. Research Interests

- *Sequential decision making/online learning under uncertainty*: multi-armed bandits, adversarial online learning
- *Game theory*: Stackelberg games, security games, congestion games, coalitional games, last round convergence with adaptive agents
- *Human-aware AI*: task allocation, incentive engineering, machine learning with strategic human users, annoyance aware AI
- *AI for social good*: wildfire mitigation, air pollution, housing assignment, asthma attack detection

3. Work Experience:

2020 – **Associate Professor** at the University of Warwick, UK
2016 – 2020 **Lecturer** (Asst. Prof. equivalent) at the University of Southampton, UK
2011 – 2015 **Senior Research Fellow** at the University of Southampton
2007 Jul – Oct **Software engineer intern at CERN**, the European Organization for Nuclear Research
2005 – 2007 **Software developer (contractor)** at Microsoft Consultancy Services Hungary

4. Education

2008 – 2011 **University of Southampton**
PhD degree in *Computer Science*
Thesis: Budget-Limited Multi-Armed Bandits
Supervisors: Nicholas R. Jennings and Alex Rogers
Examiners: Nicoló Cesa-Bianchi, Jörg Fliege
2002 – 2007 **Budapest University of Technology and Economics**
Diploma (BSc+MSc equiv.) degree in *Computer Engineering*
Supervisor: János Leventovszky

5. Awards

- 2019 **IJCAI 2019 Early Career Spotlight Invited Talk**
- 2018 **Vice-Chancellor's Award** – *for the most outstanding research/academic performance in the last 5 years (2013-2018).*
- 2018 **Royal Society Kang Po Tong Fellowship** – *3-month visit to City University of Hong Kong (collaborator: Minming Li).*
- 2017 **Visiting Fellow Award at the Center for Artificial Intelligence in Society (CAIS), University of Southern California** – *visiting scholar at the Assistant Professor level for 1 month (host: Milind Tambe).*
- 2017 **Dean's Award** – *for the exceptional contributions to the Faculty of Physical Sciences and Engineering, University of Southampton, UK.*
- 2016 **Most Engaging Lecturer Award (year 2015/16)** – *best lecturer in the Faculty of Physical Sciences and Engineering (out of more than 200 academics).*
- 2014 **Finalist in the category of Mathematics at STEM for Britain Scientific Competition** - *was invited to the House of Commons to present research work.*
- 2013 **BCS Distinguished PhD Thesis Award** (for the best Computer Science PhD thesis in the UK) – *2nd Prize.*
- 2013 **ECCAI PhD Dissertation Award** (for the best European PhD thesis in Artificial Intelligence) – *2nd Prize.*
- 2012 **AAAI 2012 Outstanding Paper Award** - *Honourable Mention.*
- 2012 **ECAI 2012 Best Student Paper Award** – *Runner up.*
- 2005, 2006 **Fellowship of the Republic Award** (for the best 1% of university students in Hungary) – *2-time winner.*

6. Research Grants

- 2019-2020 **SPRINT** – collaborative project with an industrial partner (MAFIC) to develop activity detection tools in shipyards – *total grant of £50,000.00 (PI).*
- 2019-2020 **GCRF Strategic Development Fund** – *secured total of £42,000.00 to support the air pollution monitoring project in Vietnam (PI).*
- 2017 **HEFCE Newton Fund Official Development Assistance Fund** – *secured total grant of £5,513.00 to support the crowdsourced air pollution monitoring project in Vietnam (PI).*
- 2016 - 2018 **STRICT** – cyber security solutions for smart traffic control systems
Principle Investigator – *secured total grant of approx. £398,000.00, with £199k from EPSRC (UK) and £199k from NRF (Singapore).*

2016 - 2017 **EPSRC Institutional Sponsorship** – secured total grant of £9,000.00 to support research collaboration with CWI, Amsterdam on investigating user bother cost in intelligent systems (**PI**).

7. Community Activities

- **Member of the IFAAMAS Board of Directors (2018-2024)**, the main governing body of the international community of autonomous agents and multiagent systems.
- **Local Chair of the 20th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2021)**.
- **Sponsorship Chair of the 18th and 19th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2019, AAMAS 2020)**.
- **Local Co-Chair of the 6th International Conference on Human-Agent Interaction (HAI 2018)**.
- **Co-organiser of PRIMA 2021** (the 24th International Conference on Principles and Practice of Multi-Agent Systems).
- **Local Co-Chair of KR 2021** (the 18th International Conference on Principles of Knowledge Representation and Reasoning).
- **Organiser and Co-Chair** of the Second and Third International Workshops on Human Agent Interaction Design and Models (**HAIDM 2013, 2014**); the Workshop on Multiagent Systems at Scale (**MassiveMAS 2015**); the Workshops on Security and Multiagent Systems (**SecMAS 2016, ADVERSE 2017**); the International Workshop on AI for Smart Grids and Smart Buildings (**AISGSB 2017**); and the International Workshop on Optimisation in Multiagent Systems (**OptMAS 2017, 2018**).
- **Organiser** of the Workshop on **Machine Learning and Its Applications in Vietnam 2014**.
- **SPC/PC member/reviewer** of the following conferences (multiple times): AAAI, AAMAS, ACM EC, AISTATS, COLT, HCOMP, ICML, IJCAI, NeurIPS, SAGT, WINE
- **Reviewer** for the following journals: Journal of Autonomous Agent and Multi-Agent Systems (JAAMAS), Journal of Machine Learning Research (JMLR), Swarm Intelligence, IEEE Transactions on Computers, IEEE Transactions on Signal Processing, Journal of Artificial Intelligence Research (JAIR), Artificial Intelligence (AIJ), Journal of Theoretical Computer Science.

8. Academic Supervision and Collaborations

8.1 Current postdocs and PhD students:

- *Nick Bishop* (PhD student, Southampton, 2018-) - bilevel optimisation problems in machine learning (co-supervised with Enrico Gerding)
- *Tom Davies* (PhD student, Southampton, 2019-) - algebraic topology and its applications in machine learning (co-supervised with Corina Cirstea)

- *Le Cong Dinh* (PhD student, Southampton, 2018-) - learning and last round convergence in asymmetric games (co-supervised with Tri-Dung Nguyen and Alain Zemkoho)
- *Taha Gunes* (PhD student, Southampton, 2017-) - vulnerability analysis of trust systems in AI (co-supervised with Tim Norman)
- *Guillermo Moreno* (PhD student, Southampton, 2018-) - influence maximisation games (co-supervised with Markus Brede)
- *Tin Leelavimolsilp* (PhD student, Southampton, 2016-) - selfish mining in multi-agent blockchain systems (co-supervised with Seb Stein)

8.2 Completed PhDs and postdocs:

- *Md Mosaddek Khan* (PhD student, Southampton, 2015-18) - decentralised constraint optimisation problems - Last known position: Asst. Prof. at Univ. of Dhaka
- *Edoardo Manino* (PhD student, Southampton, 2015-19) - Bayesian inference techniques in crowdsourcing - Last known position: postdoc at Southampton
- *Paolo Serafino* (postdoc, Southampton, 2016-18) - strategyproof smart traffic control - Last known position: postdoc at Oxford
- *Nhat Truong* (PhD student, Southampton, 2015-19) - incentive engineering in crowdsourcing systems

8.3 Hosted visitors (both academics and PhD students):

- *Bo An* (NTU, Singapore) - security games, multi-agent systems
- *Tim Baarslag* (CWI/Utrecht, Netherlands) - user annoyance
- *The Anh Han* (Teesside, UK) - evolutionary game theory
- *Minming Li* (CUHK, Hong Kong) - network games
- *Jiarui Gan* (Oxford, UK) - deception in Stackelberg games
- *Qingyu Guo* (NTU, Singapore) - learning in security games
- *Peter Key* (MSR Cambridge, UK) - online keyword bidding
- *Marcin Waniek* (NYU Abu Dhabi, UAE) - Dollar auctions

8.4 Hosted interns:

- *Balint Gucsi* (Southampton, 2019) - annoyance aware preference elicitation in human-robot collaboration
- *Erich Zimmermann* (Southampton, 2019) - AI for asthma attack detection/prediction
- *Yoana Paleva* (Southampton, 2018) - AI for suicide prevention - Last known position: with Microsoft Cambridge
- *Yi Zheng* (Southampton, 2018) - security games for smart traffic control - Last known position: PhD student at USC with Sven Koenig
- *Will Greedy* (Southampton, 2017) - Bayesian adversarial machine learning
- *Ionela (Gini) Mocanu* (Southampton, 2017) - online learning based data manipulation against ML algorithms - Last known position: PhD student at Univ. of Edinburgh
- *Dan Tudosiu* (Southampton, 2017) - membership attack approaches against ML algorithms - Last known position: PhD student at King's College London

8.5 Research visits:

- *Tao Qin* (MSR Asia, China) – 2013. Collaboration on budgeted bandits

- *Bo An* (NTU, Singapore) – 2016 - 2018. STRICT project
- *Iyad Rahwan* (MIT, US) – 2016. Human-AI collaboration
- *Milind Tambe* (USC, US) – 2017. CAIS Visiting Fellowship
- *Son Tran* and *William Yeoh* (NMSU, US) – 2017. Collaboration on human-aware preference elicitation
- *Tim Baarslag* and *Michael Kaisers* (CWI, Netherlands) – 2017. Annoyance-aware AI

8.6 PhD examinations:

- *Filippo Bistaffa* (Verona) – 2016
- *Shaona Gosh* (Southampton) – 2016
- *Stefano Paladino* (Politecnico di Milano) – 2017
- *Huu Viet Huynh* (Deakin) – 2017
- *Kostas Kouvaris* (Southampton) – 2018
- *Muhammad Shahreeza Saruz Bin Kassim* (Southampton) – 2018
- *Olabambo Ifeoluwa Oluwasuji* (Southampton) – 2019
- *Muhammad Zaid Hameed* (Imperial College London) – 2020
- *Sambaran Bandyopadhyay* (IISc, India) – 2020

8.7 Other research collaborations:

Academic collaborators:

- *Hau Chan* (Nebraska-Loncoln, US) - discrete optimisation, AI for social good
- *Fei Fang* (CMU, US) - security games, AI for social good
- *Enrico Gerding* (Southampton, UK) - mechanism design for truthful machine learning
- *Nick Jennings* (Imperial College London, UK) - human-agent collectives, multi-agent systems
- *Tri-Dung Nguyen* (Southampton, UK) - game theory
- *Tim Norman* (Southampton, UK) - trust modeling in multi-agent systems
- *Zinovi Rabinovich* (NTU, Singapore) - security games, multi-agent systems
- *Gopal Ramchurn* (Southampton, UK) - demand-side management
- *Alex Rogers* (Oxford, UK) - multi-agent systems, sensor networks
- *Arunesh Sinha* (SMU, Singapore) - empirical games
- *Sebastian Stein* (Southampton, UK) - crowdsourcing
- *Danesh Tarapore* (Southampton, UK) - human-robot collaborative learning
- *Haifeng Xu* (Univ. of Virginia, US) - bandit theory, security games
- *Xiaowei Wu* (Univ. of Macao) - network games

Other collaborators (student/postdoc/industry)

- *Hung Bui* (Adobe Research, now at VinAI) – factorised bandits
- *Shahzad Gholami* (Microsoft, US) – green security games
- *Branislav Kveton* (Adobe Research, now at Google) – factorised bandits
- *Tiep Le* (NMSU, US) - home energy management
- *Debmalya Mandal* (Columbia University)- blocking bandits
- *Anshuka Rangi* (UCSD, US) - budgeted bandits
- *Matteo Venzani* (Microsoft, UK)- resource allocation in crowdsourcing systems
- *Dong Quan Vu* (Grenoble, France) - Colonel Blotto games
- *Bryan Wilder* (Harvard, US) - AI for social good