



HONG-TRI NGUYEN


PhD, ScD in Computer Science

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 11/1993

 Scholar/Hong-TriNguyen

 /in/tri-hong-nguyen

2. DEGREES

- 06/2019 - 11/2023 **Doctor in Computer Science and Engineering** University of Oulu, Finland
Supervisor: Docent. Susanna Pirttikangas, Docent. Juha Partala, Dr. Lauri Lovén
Reviewers: Prof. Raimundas Matulevicius, Assoc. Prof. Anh Dinh,
Opponent: Prof. Hong-Linh Truong
- 09/2016 - 10/2018 **Master in Computer Science (99/110)** University of Pisa, Italy
Supervisor: Prof. Fabrizio Baiardi, Prof. Laura Ricci
- 09/2011 - 07/2015 **Bachelor in Computer Science (Honour)** University of Information Technology, Vietnam
Supervisor: Dr. Duc Minh Duong, Dr. Thanh Duc Ngo

3. OTHER EDUCATION AND EXPERTISE

- 09/2022 - 06/2024 **University Pedagogy, Basic Studies (25 ETCs)** University of Oulu, Finland
Basic of University Pedagogy
Research-based teacher-hood
Teaching practice in university pedagogy
- 10/2019 - 01/2020 **Research Visit - Insight SFI Research Centre for Data Analytics** University College Dublin, Ireland
Supervisor: Prof. Tahar Kechadi and Dr. Ngoc Tran
Blockchain technology in 6G applications and reputation systems

4. LANGUAGE SKILLS

Native	Vietnamese
Advanced	English
Intermediate	Finnish
	Read, speak, and write - Intermediate
	Listen - Elementary

5. CURRENT EMPLOYMENT

- 05/2024 - present **Postdoc researcher at The Aalto Systems and Services Engineering Analytics** Aalto University, Finland
Supervisor: Prof. Hong-Linh Truong

6. PREVIOUS WORK EXPERIENCE

- 01/2024 - 04/2024 **Postdoc researcher in Center for Ubiquitous Computing** University of Oulu, Finland
Supervisor: Dr. Timo Bräysy and Docent. Susanna Pirttikangas
- 11/2018 - 12/2023 **Doctoral researcher in Center for Ubiquitous Computing** University of Oulu, Finland
Supervisor: Docent. Susanna Pirttikangas, Docent. Juha Partala, Dr. Lauri Lovén
- 01/2016 - 04/2016 **Teaching Assistant in Department of Information System** University of Information Technology, Vietnam
Supervisor: Dr. Duong Minh Duc

7. CAREER BREAKS

- 07/2015 - 12/2015 **No fund support after Bachelor graduation** University of Information Technology, Vietnam

8. RESEARCH FUNDING AND GRANTS

- 2022 **Tauno Tönningin Säätiö**
Scholarship celebrates individuals who promote and support technological and other scientific research for economic growth
- 2021 **Nokia Foundation**
Scholarship celebrates individuals making significant contributions to information and communications technologies

9. RESEARCH OUTPUT

Book Chapters

1. **Nguyen, T.**, Lovén, L., Partala, J., & Pirttikangas, S. (2021). The intersection of blockchain and 6G technologies. In *6G Mobile Wireless Networks* (pp. 393-417). Cham: Springer International Publishing.

Journals

1. **Nguyen, T.**, Nguyen, H., Nguyen Gia, T. (2024). Exploring the Integration of Edge Computing and Blockchain IoT: Principles, Architectures, Security, and Applications. *Journal of Network and Computer Applications*.
2. **Nguyen, T.**, Nguyen, H., Partala, J., & Pirttikangas, S. (2023). TrustedMaaS: Transforming trust and transparency Mobility-as-a-Service with blockchain. *Future Generation Computer Systems*, 149, 606-621.
3. **Nguyen, T.**, Katila, R., & Gia, T. N. (2023). An advanced internet-of-drones system with blockchain for improving quality of service of search and rescue: A feasibility study. *Future Generation Computer Systems*, 140, 36-52.

Conferences

1. Nguyen, H., **Nguyen, T.**, Lauri Lovén, & Pirttikangas, S. (2024, July). Wait or Not to Wait: Evaluating Trade-Offs between Speed and Precision in Blockchain-based Federated Aggregation. In *International Conference on Distributed Computing Systems*. IEEE.
2. Prateek, S., **Nguyen, T.**, Mayukh, R C., Pirttikangas, S., and Aloizio, P. S. (2024). Fair Consensus in Blockchain with Heterogeneous Miners using Reinforcement Learning Aided Adaptive Proof-of-Work. IEEE.
3. Nguyen, H., **Nguyen, T.**, Leppänen, T., Partala, J., & Pirttikangas, S. (2022, June). Situation awareness for autonomous vehicles using blockchain-based service cooperation. In *International Conference on Advanced Information Systems Engineering* (pp. 501-516). Cham: Springer International Publishing.
4. **Nguyen, T.**, Tran, N., Loven, L., Partala, J., Kechadi, M. T., & Pirttikangas, S. (2020). Privacy-aware blockchain innovation for 6G: Challenges and opportunities. *2020 2nd 6G Wireless Summit (6G SUMMIT)*, 1-5.
5. **Nguyen, T. H.**, Partala, J., & Pirttikangas, S. (2019, July). Blockchain-based mobility-as-a-service. In *2019 28th international conference on computer communication and networks (icccn)* (pp. 1-6). IEEE.
6. **Nguyen, T. H.**, Duong, D. M., & Duong, D. A. (2015, January). Robust and high capacity watermarking for image based on DWT-SVD. In *The 2015 IEEE RIVF International Conference on Computing & Communication Technologies-Research, Innovation, and Vision for Future (RIVF)* (pp. 83-88). IEEE.
7. **Nguyen, T. H.**, & Duong, D. M. (2015, October). Reversible medical image watermarking technique based on choosing threshold values in histogram shifting. In *2015 Seventh International Conference on Knowledge and Systems Engineering (KSE)* (pp. 204-209). IEEE.

Tech Reports

1. Ylianttila, M., Kantola, R., Gurtov, A., Mucchi, L., Oppermann, I., Yan, Z., **Nguyen, T.**,...& Röning, J. (2020). 6G white paper: Research challenges for trust, security and privacy. arXiv preprint arXiv:2004.11665.

10. RESEARCH SUPERVISION AND LEADERSHIP EXPERIENCE

01/2024 - 04/2024	Coordinator Work package 4 - Blockchain and 6G in logistic	University of Oulu, Finland
2012 - 2014	Leader and key member of a CTF team	"KQCQ" in ctftime.org

11. TEACHING MERITS

2019 - 2024	Teaching Assistant and joint Lecturer - "Distributed Systems" course Students' exercises & projects	University of Oulu, Finland
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12. AWARDS AND HONOURS

2018	Scholarships of the University of Pisa, Italy Scholarship is reserved for the best-performing students from non-EU countries	
2015	"Information Technology and Communication" award by Ho Chi Minh City People's Committee	
2015	Award and Representative for Ho Chi Minh City in the 2nd Vietnam Talent Youth Congress	
2014	Third prize in "Information security" CTF competition	University of Information Technology, Vietnam
2013	Award for Hacking Excellence in "Toaster War" (PicoCTF)	CMU Cybersecurity Competition

13. OTHER KEY ACADEMIC MERITS, SUCH AS:

Reviewers

Journals: IEEE Trans on Mobile Computing · IEEE Trans on AI · IEEE IoT Journal · IEEE Access · Springer
Arabia Journal for Science and Engineering · Journal of Big Data · Computing

Confs: Percom

14. SCIENTIFIC AND SOCIETAL IMPACT

12/10/2025
16/10/2025

UbiComp / ISWC
Local chair

Aalto University, Finland

21/03/2022
25/03/2022

The 20th International Conference on Pervasive Computing and Communications
Organizing the connection from online participants

Virtual

22/08/2021
25/08/2021

Identifying Key Enablers in Edge Intelligence Organization
Organizing the connection between on-site and online participants

Dagstuhl Seminar 21342, Germany

15. OTHER MERITS
