HONG-TRI NGUYEN

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in /in/tri-hong-nguyen

6 01/11/1993

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: Assoc. 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

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 and Write IntermediateListen and speak 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

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.

- 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

University of Oulu, Finland

Work package 4 - 6G in logistic

2012 - 2014 Leader and key member of a CTF team

"KQCQ" in ctftime.org

11. TEACHING MERITS

09/2022 - 06/2024 University Pedagogy, Basic Studies

University of Oulu, Finland

- Basic of University Pedagogy
- · Research-based teacher-hood
- · Teaching practice in university pedagogy

2019 - present

2015

Teaching Assistant - "Distributed Systems" course

University of Oulu, Finland

· Students' exercises & projects

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

Award and Representative for Ho Chi Minh City in the 2 nd Vietnam Talent Youth Congress

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:

Professional Services	Reviewers - Journals: IEEE Trans on Mobile Computing, IEEE IoT Journal, IEEE Access, Springer Arabia Journal for Science and Engineering, and Journal of Big Data - Conferences: Percom
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
21/03/2022 25/03/2022	The 20th International Conference on Pervasive Computing and Communications Organizing the connection from online participants Virtual
14. SCIENTIFIC AND SOCIETAL IMPACT	
15. OTHER MERITS	