Dr. Tran Huy Long
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Job Titles

Lecturer, Faculty of Telecommunications, Posts and Telecommunications Institute of Technology, Vietnam

Education and Qualifications

- 2008–2013: Engineering Degree in Electronic and Telecommunication, Electric Power University, Vietnam.
- 2013–2015: Master's Degree in Telecommunications Engineering, Posts and Telecommunications Institute of Technology, Vietnam.
- 2026: PhD Degree in Telecommunications Engineering, University of Transport and Communications, Vietnam.

Job Experiences

- 2023–present: Lecturer at Posts and Telecommunications Institute of Technology, Vietnam.
- 2020 - 2023: Researcher at Reseach Institute of Posts and Telecommunications, Vietnam.
- 2019 - 2020: Researcher at Vietnam Research Institute of Electronics, Informatics and Automation, Vietnam.
- 2017-2019: Staff at Ha Trang Company Limited, Vietnam.
- 2014 - 2016: Researcher at Reseach Institute of Posts and Telecommunications, Vietnam.

Teaching Experiences

- Undergraduate Program in Electronic and Telecommunication Engineering, Posts and Telecommunications Institute of Technology, Vietnam:
  - TEL1368 – Signals and Systems
  - TEL1452 - IoT Architecture and Protocols
  - TEL1344 - Theory of communication

Research (over the last 5 years)

Research Interests

- Internet of thing (IoT).
- Wireless Sensor Networks.
- Routing security/Network security

Research Projects

- Research on developing a set of standards "Extended common interface for conditional access blocks used in digital terrestrial television"; and "Digital

video broadcasting (DVB) - Implementation guide for DVB-IPTV applications phase 1 – Part 1: Core IPTV functions". Ministry-level topic 2018.

- Development and application of multi-role security authentication system using fingerprints in the fields of security and banking ", code 01/2018/CNC-HDKHCN, State-level Science and Technology Project, under the Program" Development of some high-tech industries" of the Ministry of Industry and Trade.
- Research, design and manufacture of monitoring system for low voltage capacitor banks from the Center, code DTKHCN.083/19, Ministry-level project 2019.
- Research on building an automatic monitoring and warning system for oil level in transformers, applied to operating transformer stations with and without personnel, ministerial-level project 2020.
- Research, design and manufacture of a specialized mobile information system relaying satellites to serve remote areas, islands and emergency situations" Code: VT-CN.04/18-20, National Science and Technology Task 2021.
- Research on security solutions in wireless sensor networks (WSN) for smart urban construction, code DT.44/21, Ministry of Information and Communications, October 2021.
- Research on reviewing and converting national technical regulations on telecommunications networks into national standards. Code: DT.13/22, ministerial-level project 2022.
- Research and development of Digital Museum solutions, VNPT Group Science and Technology Project 2022.
- Research on developing national standards on information security assessment for information security event management and analysis (SIEM) products, DT.49/23, Ministry-level project 2023.
- Research on building platform software to develop applications for SCADA systems using key technologies of the 4th industrial revolution (IR4). Code: KC-4.0-30/19-25, National technology application and development research project 2024.

Book Publication

- Long Tran Huy, Quynh Le Chi, Canh Duong Tran, Chinh Tran Thien, Ngoc Le, Anh Thu Le, Huy Le and Phuong Thao Le, Security for 5G Networks is Based on Pseudo-Random Sequences, Chapter 19 in Creative Approaches Towards Development of Computing and Multidisciplinary IT Solutions for Society 2024.
- Cong Pham Chi, Thai Trinh Hai, Long Tran Huy, Linh Le Ba, Ngoc Le and Nghia Hoang Trong, Platform Software for Building Web SCADA Applications, Chapter 33 in Creative Approaches Towards Development of Computing and Multidisciplinary IT Solutions for Society 2024.

Journal/Conference Publication

- Van Son Nguyen, Hoang Anh Dang, Van Dung Tran, Cao Dai Pham, Thi Bich Tran, Van Trung Nguyen, Xuan Loi Dai, and **Tran Huy Long**, "Design of a tunable center frequency and small size cavity bandpass filter by separating capacitor-loaded resonators", Indonesian Journal of Electrical Engineering and Computer Science 2024, https://ijeecs.iaescore.com/index.php/IJEECS/article/view/35764/18549.
- **Long Tran Huy**, Chinh Tran Thien, Hoai Trung Tran, Vinh Pham Van, A novel security routing using identity-based lightweight digital signature in WMSNs, Journal of Science and Technology, Hanoi University of Industry, vol. 59 no. 6A (2023).
- **Long Tran Huy**, Chinh Tran Thien, Hoai Trung Tran, A novel lightweight secure routing based on the TPGF for WMSNs, Journal of Science and Technology on Information and Communications, No.03 (CS.01) 2023.
- **Long Tran Huy**, Chinh Tran Thien, Hoai Trung Tran, Classification of Secure Routing Protocols in Wireless Sensor Networks, JST: Smart Systems and Devices 2023.
- Nguyen Manh Hung, Pham Tien Huy, **Long Tran Huy**, Design and manufacture of STM32 multi-function kit, application in teaching and developing IoT systems, Hanoi Open University Science Journal 2023.
- **Long Huy Tran**, Chinh Thien Tran, and Trung Hoai Tran, Quynh Le Chi, "Monitoring, detecting and early warning of forest fires using Blockchain in wireless sensor network", International Journal of Computer Science and Mobile Computing, Vol.11, Issue.11, November 2022, pg. 165-176.
- **Tran Huy Long**, Tran Thien Chinh, Tran Hoai Trung, Nguyen Manh Hung, Security Issues of Wireless Sensor Network in Smart City, International Conference on Advanced Technologies for Communications (ATC - 2022).
- **Tran Huy Long**, Tran Thien Chinh, Tran Hoai Trung, Nguyen Manh Hung, "Physical layer security of wireless sensor networks in smart cities", Scientific conference "New technology & Applications in the field of Electricity - Electronics - Automation", University of Transport - November 2022.
- Tran Thien Chinh, **Tran Huy Long**, Nguyen Canh Minh, Multi-role authentication technology uses fingerprints applying to power station management, Journal of Military Science and Technology Research 2021.
- Tran Thien Chinh, **Tran Huy Long**, Application of multi-role fingerprint authentication technology in education management, Journal of Science and Information and Communication Technology No. 03 (CS.01) 2020.

Signature

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