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Job Titles

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

Education and Qualifications

- 1994–1999: Engineering Degree in Electronic and Telecommunication, University of Transport and Communications, Hanoi, Vietnam.
- 2002–2005: Master Degree in Electronic and Telecommunication, Posts and Telecommunications Institute of Technology, Vietnam.
- 2013–2017: Doctoral Degree in Telecommunication Engineering, Posts and Telecommunications Institute of Technology, Vietnam.

Job Experiences

- 1999–present: Lecturer at Posts and Telecommunications Institute of Technology, Vietnam.

Teaching Experiences

- Undergraduate Program in Electronic and Telecommunication Engineering:
  - TEL1415 - Mobile Communications
  - TEL1462 - RF Transceiver Engineering
  - TEL1456 - Wireless Networks
  - TEL1436 - Broadband Wireless Technologies
- Graduate Program in Telecommunication Engineering:
  - Advanced Wireless Communications
  - Broadband Wireless/Optical Access Technologies

Research (over the last 5 years)

Research Interests

- Optical wireless communications (FSO, VLC) and underwater communications: systems design and performance analysis
- Enabling technologies and techniques for next-generation wireless networks
- Optical code-division multiple access
- Quantum key distribution

Research Projects

- Physical layer security for multihop optical underwater communications. Grant No. 13-HV-2023-VT. Role: Project Manager. Year: 2023. University Project
- Research on quantum communication technology for high-security requirements in 6G mobile networks. Grant No. DT.26/23. Role: Project Member. Year: 2023. Ministry Project
- Design and security analysis of satellite-based free-space quantum key distribution systems for wireless and vehicular networks. Grant No. 102.02-2019.08. Role: Project Member. Year: 2019 - 2022. NAFOSTED Project

Book Publication

- Dang The Ngoc, Pham Thi Thuy Hien "Nguyen ly va hieu nang he thong truyen thong quang khong day", Nha xuat ban thong tin va truyen thong, ISBN:3639024168, Oct. 2024.

Journal/Conference Publication

- Thang V. Nguyen, Hoa T. Le, Hien T. T. Pham, Vuong V. Mai, and Ngoc T. Dang, "Enhancing Design and Performance Analysis of Satellite Entanglement-based CV-QKD/FSO Systems," IEEE Access, vol. 11, pp. 112097-112107, 2023.
- Thang V. Nguyen, Hoa T. Le, Hien T. T. Pham, Ngoc T. Dang "Availability of Free-Space Laser Communication Link with the Presence of Clouds in Tropical Regions," EAI Endorsed Transactions on Industrial Networks and Intelligent Systems, vol. 10, no. 3, 2023.
- Hang T. T. Phan, Minh B. Vu, Hien T. T. Pham, and Ngoc T. Dang, "Satellite continuous-variable quantum key distribution systems using code-division multiple access," Opt. Continuum, vol. 2, no. 2, pp. 289-302, Feb. 2023.
- Hien T. T. Pham, Minh B. Vu, Hoa T. Le, Dieu Linh Truong, and Ngoc T. Dang, "High-altitude platform-aided Two-way Relaying for FSO Access Networks using Optical CDMA," Optical Engineering, vol. 60, no. 9, p. 096107, 2021.
- Nam D. Nguyen, Hang T. T. Phan, Hien T. T. Pham, Vuong V. Mai, and Ngoc T. Dang, "Reliability improvement of satellite-based quantum key distribution systems using retransmission scheme," Photonic Network Communications, vol. 42, pp. 27-39, 2021.
- Nga T. T. Nguyen, Minh Q. Vu, Hien T. T. Pham, Bac H. Dang, and Ngoc T. Dang, "Performance Enhancement of HAP-based Relaying M-PPM FSO System using Spatial Diversity and Heterodyne Detection Receiver" Journal of Optical Communications, vol. 42, no. 1, pp. 111-120, 2021.
- Nam D. Nguyen, Hien T. T. Pham, Vuong V. Mai, and Ngoc T. Dang, "Comprehensive performance analysis of satellite-to-ground FSO/QKD systems using key retransmission," Optical Engineering, vol. 59, no. 12, p. 126102, Dec.

2020.

Signature

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