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Job Titles

Head of Data Engineering Department, Faculty of Telecommunications, Posts and Telecommunications Institute of Technology, Vietnam

Education and Qualifications

- 1998–2003: Engineering Degree in Electronics and Telecommunications, Posts and Telecommunications Institute of Technology, Vietnam.
- 2007–2009: Master Degree in Electrical Engineering and Computer Science, Graduate School of Engineering, Nagoya University, Japan.
- 2009–2012: Doctoral Degree in Electrical Engineering and Computer Science, Graduate School of Engineering, Nagoya University, Japan.

Job Experiences

- 2003–present: Lecturer at Posts and Telecommunications Institute of Technology, Vietnam.
- 2012-2014: Postdoc fellow at Nagoya University, Japan.
- 2013: Visiting researcher at KTH, Sweden.
- 20114-2015: Research scientist at University of California, Davis campus, US.

Teaching Experiences

- Undergraduate Programs in the fields of Electronics and Telecommunications Engineering, IT and Data Engineering:
  - TEL1438 – Computer Architectures
  - TEL1439 – Operating Systems
  - TEL1440 – Programming Techniques
  - TEL1342 - Data Structures and Algorithms
  - DAE1301 - Introduction to Data Engineering
- Graduate Program in Telecommunications Engineering:
  - Modeling and Simulations
  - Performance Analysis of Information Systems

Research (over the last 5 years)

Research Interests

- Optical network technologies

- Network design and optimization
- Machine learning and applications
- Bioinformatics and Data science

Research Projects

- Research on Developing National Standards for Interaction with Cloud Service Partners. Grant No. DT.11/23. Role: Project Manger. Year: 2023. Ministry Project
- Performance Improvement of Flexible Grid Optical Networks Based on Machine Learning Techniques. No. 06-HV-2022-VT. Role: Project Member. Year: 2022. University 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: Member. Year: 2019 - 2022. NAFOSTED Project

Book Publication

- Vo Nguyen Quoc Bao, Le Hai Chau, "Mo phong he thong truyen thong", Nha xuat ban Khoa hoc va ky thuat, ISBN: 978-604-67-1500-9, Oct. 2020.
- Vu Huu Tien, Le Hai Chau, Vo Nguyen Quoc Bao, "Xu ly va truyen thong da phuong tien", Nha xuat ban Khoa hoc va ky thuat, ISBN: 978-604-67-2352-3, 2022.

Journal/Conference Publication

- H. -L. Nguyen, D. -L. Vu and H. -C. Le, "Exploiting Machine Learning And Gene Expression Analysis in Amyotrophic Lateral Sclerosis Diagnosis," 2024 Tenth International Conference on Communications and Electronics (ICCE), Danang, Vietnam, 2024, pp. 363-368, doi: 10.1109/ICCE62051.2024.10634725.
- T. V. Huu, S. Van Pham, T. N. T. Huong and H. -C. Le, "QoE Aware Video Streaming Scheme Utilizing GRU-Based Bandwidth Prediction and Adaptive Bitrate Selection for Heterogeneous Mobile Networks," in IEEE Access, vol. 12, pp. 45785-45795, 2024, doi: 10.1109/ACCESS.2024.3382155.
- V. T. Pham, T. V. Huu, M. T. Nguyen and H. -C. Le, "Advanced Feature Processing for IoT-Based Intrusion Detection System," 2023 RIVF International Conference on Computing and Communication Technologies (RIVF), Hanoi, Vietnam, 2023, pp. 37-42, doi: 10.1109/RIVF60135.2023.10471837.
- D. -L. Vu and H. -C. Le, "Machine Learning-Based ALS Diagnosis Using Gene Expression Data," 2023 RIVF International Conference on Computing and Communication Technologies (RIVF), Hanoi, Vietnam, 2023, pp. 354-359, doi: 10.1109/RIVF60135.2023.10471816.
- Duc-Long Vu and Hai-Chau Le. 2023. Efficient Machine Learning-based Gene Selection Exploiting Immune-related Biomarkers and Recursive Feature Elimination for Sepsis Diagnosis. In Proceedings of the 12th International

Symposium on Information and Communication Technology (SOICT '23). Association for Computing Machinery, New York, NY, USA, 585–591. https://doi.org/10.1145/3628797.3628989

- Pham, VS., Nguyen, A., Dang, H.B. et al. Diagnosis of sudden cardiac arrest using principal component analysis in automated external defibrillators. Sci Rep 13, 8768 (2023). https://doi.org/10.1038/s41598-023-36011-9
- V. T. Pham, V. -S. Pham, M. T. Nguyen and H. -C. Le, "Efficient Electrocardiogram-based Arrhythmia Detection Utilizing R-peaks and Machine Learning," *2023 International Conference on System Science and Engineering (ICSSE)*, Ho Chi Minh, Vietnam, 2023, pp. 604-608, doi: 10.1109/ICSSE58758.2023.10227145.

Signature

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