Assoc. Prof. Dr. Nguyen Tien Ban

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Job Titles

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

Education and Qualifications

- 1985–1991: Engineering Degree in Electronics Engineering, Leningrad Electrotechnical Institute – LETI (USSR).
- 1999–2003: Doctoral Degree in Electronics and Telecommunications, Saint Petersburg State University of Telecommunications – SUT (Russian Federation).

Job Experiences

- 1995 - 1997: Lecturer at Posts and Telecommunications Training Center No.1, Vietnam.
- 1997 - 2008: Lecturer at Posts and Telecommunications Institute of Technology, Vietnam.
- 2008 - 2010: Head of Department of Telecommunications Network, Posts and Telecommunications Institute of Technology, Vietnam.
- 2010 - present: Dean of Faculty of Telecommunications, Posts and Telecommunications Institute of Technology, Vietnam.

Teaching Experiences

- Undergraduate Program in Electronic and Telecommunication Engineering:
  - TEL1405 - Communication Network Engineering
  - TEL1401 - Information Network Security
  - TEL1409 - Internet and Protocols
  - TEL1459 - Network Performance and Design
  - TEL1435 - Advanced Communication Network Technologies
- Graduate Program in Telecommunication Engineering:
  - TEL4303 - Queueing Theory and Applications
  - TEL4411 - Network Planning and Design
  - TEL5401 - Reliability Theory

Research

Research Interests

- Network Performance Analysis and Design,
- Network Planning and Optimization,
- Information System and Network Security,
- Future Internet and Protocols,
- Modeling and Simulation of Telecommunication Systems.

Books

- Nguyen Tien Ban, "Cong nghe IP/MPLS va cac mang rieng ao", Nha xuat ban Thong tin va truyen thong, 2011.

Publications (over the last 5 years)

- Vu Khanh Quy, Van-Hau Nguyen, Dao Manh Linh, Nguyen Tien Ban, Nguyen Dinh Han. "An Improved Selfish Node Detection Algorithm for Cognitive Radio Mobile Ad Hoc Networks", Wireless Personal Communications, SCIE, Q2, IF: 2.2, 2023. https://doi.org/10.1007/s11277-023-10788-4.
- Q. V. Khanh, A. Chehri, N. M. Quy, N. D. Han, and N. T. Ban, "Innovative Trends in the 6G Era: A Comprehensive Survey of Architecture, Applications, Technologies, and Challenges", IEEE Access, vol. 11, pp. 39824-39844, 2023, https://doi.org/10.1109/ACCESS.2023.3269297.
- N. M. Quy, L. A. Ngoc, N. T. Ban, N. V. Hau, Quy Vu Khanh "Edge Computing for Real-Time Internet of Things Applications: Future Internet Revolution", Wireless Personal Communications, 2023. https://doi.org/10.1007/s11277-023-10669-w.
- V. K. Quy, N. T. Ban, D. Van Anh, N. M. Quy and D. C. Nguyen, "An Adaptive Gateway Selection Mechanism for MANET-IoT Applications in 5G Networks," in *IEEE Sensors Journal*, vol. 23, no. 19, pp. 23704-23712, 1 Oct.1, 2023, https://doi: 10.1109/JSEN.2023.3307617.
- Vu Khanh Quy, Nguyen Tien Ban, Nguyen Minh Quy, & Nguyen Van Hau (2023). A Multi-Constraints Routing Scheme for MANET-assisted IoT in Smart Cities . EAI Endorsed Transactions on Industrial Networks and Intelligent Systems, 10(2) https://doi.org/10.4108/eetinis.v10i2.3388.
- Quy Vu Khanh, Nguyen Tien Ban, Dang Van Anh, Nguyen Minh Quy, Gwanggil J., "A Cross-Layer Routing Approach for MANET-Assisted IoT Applications," Transactions on Emerging Telecommunications Technologies, SCIE, IF:3.6, 10/2023. https://onlinelibrary.wiley.com/doi/abs/10.1002/ett.4887.
- Q. V. Khanh, A. Chehri, Q. N. Minh, V. -H. Nguyen and N. T. Ban, "An Efficient Routing Algorithm for Self-Organizing Networks in 5G-based Intelligent

Transportation Systems," in IEEE Transactions on Consumer Electronics, https://doi.org/10.1109/TCE.2023.3329390

- Nguyen Minh Quy, Nguyen Tien Ban & Vu Khanh Quy. "An Improved Multi-Channel Multi-Interface Routing Protocol for Wireless Mesh Networks," International Journal of Interactive Mobile Technologies, vol. 16, no. 11, pp. 136–148. https://doi.org/10.3991/ijim.v16i11.29433
- Dang Van Anh, Nguyen Duy Tan, Nguyen Tien Ban, and Nguyen Minh Quy, "Performance Analysis of Typical Routing Protocols for Cognitive Radio Ad Hoc Networks," Journal of Communications, vol. 17, no. 10, pp. 844-850, 2022. https://doi.org/10.12720/jcm.17.10.844-850
- Quy, Vu K., Nguyen V. Hau, Dang V. Anh, Nguyen M. Quy, Nguyen T. Ban, Stefania Lanza, Giovanni Randazzo, and Anselme Muzirafuti. "IoT-Enabled Smart Agriculture: Architecture, Applications, and Challenges", Applied Sciences (SCIE), Vol. 12, No. 7: 3396, 03/2022.
- Nguyen Minh Quy, Nguyen Tien Ban, and Vu Khanh Quy, "An Adaptive On-demand Routing Protocol With QoS Support for urban-MANETs," IAENG International Journal of Computer Science, Vol. 49, No. 1, pp 252-259, 2022.
- Pham Hung, Nguyen Tien Ban, Dang Hoai Bac, "A survey of channel estimation for mmwave system", Journal of Science and Technology on Information and Communications, No. 1, 2022.
- Vu Khanh Quy, Pham Minh Chuan, Vi Hoai Nam, Dao Manh Linh, Nguyen Tien Ban, Nguyen Dinh Han, "A High-Performance Routing Protocol Based on Mobile Agent for Mobile Ad Hoc Networks", International Journal of Interactive Mobile Technologies, (Scopus), Vol. 15, No. 03, pp 30-42, 2021. https://online-journals.org/index.php/i-jim/article/view/13007/0.
- Vu Khanh Quy, Vi Hoai Nam, Dao Manh Linh, Nguyen Tien Ban, Nguyen Dinh Han, "A Survey of QoS-aware Routing Protocols for the MANET-WSN Convergence Scenarios in IoT Networks", Wireless Personal Communications (Scopus, SCIE, IF: 1.6), Springer, 4/2021. https://link.springer.com/article/10.1007/s11277-021-08433-z.
- Vu Khanh Quy, Vi Hoai Nam, Dao Manh Linh, Nguyen Tien Ban, Nguyen Dinh Han, "Communication Solutions for Vehicle Ad-hoc Network in Smart Cities Environment: A Comprehensive Survey", Wireless Personal Communications (Scopus, SCIE, IF: 1.6), Springer, 8/2021. https://link.springer.com/article/10.1007/s11277-021-09030-w.

- Hung Pham, Bac Dang Hoai, Vu Khanh Quy and Ban Nguyen Tien, "Semiorthogonal User Scheduling for Millimeter Wave using Low-Resolution ADCs", Journal of Communications (Scopus), Vol. 16, No. 1, pp. 30-35, 2021.
- Nguyen Thi Thu Hang, Nguyen Chien Trinh, Nguyen Tien Ban, M. Raza, Huan X. Nguyen, "Delay and Reliability Analysis of p-persistent Carrier Sense Multiple Access for Multi-event Industrial Wireless Sensor Networks", IEEE Sensors Journal, ISSN/eISSN:1530-437x/1558-1748 (SCI Q1), Vol. 20, No. 20, pp. 12402-12414, 2020.
- Vu Khanh Quy, Dao Manh Linh, Vi Hoai Nam, Nguyen Dinh Han, and Nguyen Tien Ban, "A Survey of Innovative Technologies Toward to Next Mobile Network Generations", International Journal of Scientific & Technology Research (Scopus), Vol. 9, No. 11, pp. 305-311, 2020.
- Pham Hung, Nguyen Tien Ban, Dang Hoai Bac, "Scheduling for Massive MIMO under Power and QoS constraints", Journal of Science and Technology on Information and Communications, No. 1, pp. 71-77, 2020.
- Vu Khanh Quy, Nguyen Tien Ban, Vi Hoai Nam, Dao Minh Tuan, Nguyen Dinh Han, "Survey of Recent Routing Metrics and Protocols for Mobile Ad-Hoc Networks", Journal of Communications (Scopus), Vol. 14, No. 2, pp. 110-120, 2019.
- Vu Khanh Quy, Nguyen Tien Ban, Nguyen Dinh Han, "A High-Performance Routing Protocol for Multimedia Applications in MANETs", Journal of Communications (Scopus), Vol. 14, No. 4, pp. 267-274, 2019.
- Pham Hung, Nguyen Tien Ban, Dang Hoai Bac, "Scheduling for Massive MIMO using channel aging under QoS constraints", Journal of Science and Technology, No. 57, pp. 617-630, 2019.
- Nguyen Thi Thu Hang, Nguyen Chien Trinh, Nguyen Tien Ban, "PMME – Priority MAC protocol for MultiEvent Wireless Sensor Network", Journal of Military Science and Technology, No. 59, pp. 12-25, 2019.

Signature

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