Dr. Cao Hong Son
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Job Titles

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

Education and Qualifications

- 1990–1995: Engineering Degree in Radio and Communication, University of Transport and Communications, Vietnam.
- 1998–2001: Master Degree in Electronic and Telecommunication, Hanoi University of Science and Technology, Vietnam.
- 2010–2017: Doctoral Degree in Telecommunication Engineering, Posts and Telecommunications Institute of Technology, Vietnam.

Job Experiences

- 1995–present: Lecturer at Posts and Telecommunications Institute of Technology, Vietnam.

Teaching Experiences

- Undergraduate Program in Electronic and Telecommunication Engineering:
  - TEL1344 - Theory of communication
  - TEL1406 - Optical Communications
  - TEL1346 - Optical Communication Networks
- Graduate Program in Telecommunication Engineering:
  - Nonlinear Fiber Optics

Research (over the last 5 years)

Research Interests

- Optical fiber communications: systems design, performance analysis, and optimization.
- Enabling technologies and techniques for optical packet switching networks.
- Optical fiber sensor Optical sensor networks.

Research Projects

- Evaluating the performance of FBG optical sensor network combined with WDM long-range network for IoT. No. 14-2024-HV-VT1. Role: Project Manager. Year: 2024. University Project.
- Research on fiber optic sensor structure based on fiber Bragg grating for IoT. No. 05-2023-HV-VT1. Role: Project Manager. Year: 2023. University Project.
- Solution to improve optical packet switch node performance in DC networks using optical buffers combined with wavelength conversion. No. 05-2022-HV-VT1. Role: Project Manager. Year: 2022. University Project.
- Research on optical packet switching nodes in data center networks. No. 02-2021-HV-VT1. Role: Project Manager. Year: 2021. University Project.
- Research on all-optical packet header processing solutions for optical packet switching in data center networks. No. 07-2020-HV-VT1. Role: Project Manager. Year: 2020. University Project.

Journal/Conference Publication

- Cao Hong Son, "FBG Optical Sensor Model for IoT," Vol. 1 No. 4 (2023): Journal of Science and Technology on Information and Communications.
- Cao Hong Son, "Improving Performance of All-optical Packet Switching Node in Data Center Networks," Vol. 1 No. 4 (2022): Journal of Science and Technology on Information and Communications.
- Cao Hong Son, "A Model of All-optical Packet Switching Node Using MPPM Header Processing Texhnique in Data Center Networks," Vol. 1 No. 1 (2021): Journal of Science and Technology on Information and Communications.
- Cao Hong Son, "Study of the Performance of an Optical Packet Switch Architecture for Data Center Networks," Vol. 56 No. 1 (02/2020): Journal of Science and Technology – Hanoi University of Industry.

Signature

Cao Hong Son