# PhD Student

**DUC-TUYEN TA** 

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## Education

10/2004–10/2008 Undergraduate Studies in Electronics and Telecommunications at the

College of Technology (now University of Engineering and Technology),

Viet Nam National University Ha Noi, Viet Nam

Program: Honor

10/2008–10/2010 M.S.c in Electronics and Telecommunications at University of Engineering and Technology (UET), Viet Nam National University Ha No

i(VNUH), Viet Nam

Specialization: Cooperative Network, MIMO communications

Thesis: Performance Analysis of Network-MIMO Systems;

Supervisor: Prof. Dr. Trinh Anh Vu, UET, VNUH

10/2014-present PhD Student at COMELEC, Telecom Paris-Tech, France

Specialization: Cognitive Radio, Physical Layer Security, Ad-hoc Net-

work, Network Coding

## Research Experience

- 8/2008–06/2009 Research Assistant, Dept.of Wireless Communications, Faculty of Electronics and Telecommunications, UET, VNUH.
  - Implementing  $Symbol\ synchronization\ module$  for MIMO testbed using FPGA
  - Participated in project Establish a MIMO-OFDM 2x2 testbed in indoor condition using FPGA, supported by ARC center, VNU-HN

- 6/2010-6/2011 Research Assistant, Dept.of Wireless Communications, Faculty of Electronics and Telecommunications, UET, VNUH.
  - Researching on Efficient and Reliable GPS Wireless Ad hoc Sensor Networks for Marine Monitoring, Searching and Rescuing (MSnR) Applications, ISIF 10, Bac Ha International University, Viet Nam.
- 6/2011-present Research Assistant, Dept.of Wireless Communications, Faculty of Electronics and Telecommunications, UET, VNUH.
  - Joint with Signal and System Laboratory, UET-VNUH in project Cross-Layer Cooperation in Future Wireless Networks based on Network Coding.
- 5/2012-10/2012 Internship in Laboratoire des signaux et systemes (L2S), Supelec, France in topic On analysis of Space-Time code/Channel code combination.
  - 3/2014-8/2014 Internship in Ono Lab, National Institute of Informatics, Tokyo, Japan in data dimension and signal processing for microphone array with Blind Source Separation (BSS).

#### Research Interests

- Dynamic Spectrum Access and Physical Layer Security for Cognitive Radio Network
- MIMO communications: Detection algorithms and cooperative MIMO.
- Distributed communication systems: Mobile ad-hoc (MANET) and wireless sensor networks, routing Protocol for ad-hoc/sensor networks.
- Physical Network Coding and Network Error Correction for Communication Systems.

## 1 Computer and Programming Skills

- C/C++, Matlab, NS-2
- FPGA design, Software Define Radio (SDR)

#### Selected Publications

- 1. Duc-Tuyen Ta, Nhan Nguyen-Thanh, Philippe Ciblat, Van-Tam Nguyen, "Extra-Sensing Game for Malicious Primary User Emulator Attack in Cognitive Radio Network", EU CNC, Paris 2015 (accepted)).
- T.D.Tuyen, T.D.Tan, T.A.Vu, H.H.Tue, Performance of STBC MIMO-OFDM Using Pilot- Aided Channel Estimation and Adaptive Predistortion, 2009 International Conference on Advanced Technologies for Communications ATC 2009, pp. 104-107.
- 3. T.D.Tuyen, T.D.Tan, T.A.Vu, H.H.Tue, *Pilot-assisted channel estimation for STBC-based MIMO-OFDM systems*, Research, Development and Application on Electronics, Telecommunications and Information Technology, Vol. E-1, No. 2 (6), Posts, Telematics and Information Technology Journal, 2009, pp. 35–39.
- 4. Duc-Tuyen Ta, T.D.Tan, T.A.Vu, Performance Analysis of Interleave-Division-Multiplexing MIMO systems in Fading Environment, accepted in IEEE-RIVF 2010, Ha Noi-Viet Nam.
- 5. T.D. Tan, Duc-TuyenTa, D.D. Do, H.V. Nguyen, Innovative WiMAX Broadband Internet Access for Rural Areas of Vietnam using TV Broadcasting Ultra-High Frequency (UHF) Bands, TENCON 2011, Bali, Indonesia

#### Awards

- Award of Toshiba Corp for excellent results in study and research (2009).
- Consolation prize Scientific Research Contest, Vifotec, Viet Nam (2008).
- Consolation prize Scientific Research Contest for students at Ministry Of Education and Trainings, Viet Nam (2008).
- 2rd prize Scientific Research Contest for students at College of Technology, Vietnam National University, Ha Noi 2008.
- Award of Nortel-Coltech for excellent results in study and research (2008)

## Certificates

- Outstanding performance certificate in DSPA SS10, Da Nang, Viet Nam.
- Certificate of merit from Hanoi University of Engineering and Technology for achievements and social activities (2008).

### **Hobbies**

• Photography, Hiking, Running

## References

These persons are familiar with my professional qualifications and my character:

#### Prof. Philippe Ciblat

Telecom Paris-Tech, France

 ${\bf Email:} philippe.ciblat@enst.fr$ 

#### Prof. Van-Tam Nguyen

Department of EECS, University of California at Berkeley, USA Email: vantamnguyen@berkeley.edu