CHI VAN PHAM

CONTACT INFORMATION

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EDUCATION

Ph.D. Electrical and Computer Engineering *Expected 2018*
University of California, Davis
Advisor: Prof. Anh-Vu Pham

M.S. Electrical and Computer Engineering. GPA: 3.8/4.0 *2013-2015*
University of California, Davis

B.E. Electrical Engineering (with highest honors) *2007-2012*
Hanoi University of Science and Technology (HUST), Hanoi, Vietnam
Advisor: Prof. Vu-Van Yem

EXPERIENCE

Microwave and Microsystems Laboratory, UC Davis
Graduate Student Researcher *Oct. 2013 - present*

Research topic: Wireless Power/Data Transfer System, Signal Integrity, Applied Electromagnetics, RF front-end module and system

- Developing bidirectional, inductive power transfer and communication system through metal
- Developing voltage tunable multiferroic materials for RF passive components
- Developed a solution to identify and locate Passive intermodulation (PIM) sources on base station antenna
- Developed a fully automated fault testing program for Huawei's base station antenna system
- Developed broadband coaxial balun for 600 W radar applications
- Developed Multiphysics (Electromagnetic-Thermal-Structural) analysis for high power microwave passive components
- Developed ultra-wideband, low loss and compact balun using Double Defected Ground structures on multilayered Liquid Crystal Polymer (LCP)

RF and Microwave Laboratory, HUST
Research Assistant *Sept. 2010 - Aug 2013*

Research topic: Development of novel artificial structures for wide-band antenna and passive component designs

- Developed Ultra-Wideband (UWB) antenna based on optimal Fractal shapes and Complementary Split Ring Resonator (CSRR) structure
- Designed high-gain and broadband antenna using Electromagnetic Bandgap structures
- Miniaturized novel MIMO antenna and stop-band filter using Left-handed materials
- Investigated Single-Loop Opto-Electronic Oscillators based on Yao-Maleki model

PUBLICATIONS

Journals

- **Chi Van Pham**, Nguyen L.K. Nguyen, Tuan-Anh Vu, A.V. Pham, and C. S. Garner, "Design and Optimization of High-Efficiency Wireless Power Transfer System Through Metal," *IEEE Transactions on Circuits and Systems II: Express Briefs* (under review)
- **Chi Van Pham**, A. V. Pham and R. E. Leoni, "Design of 600 W Low Loss Ultra-wideband Ferriteless Balun," *IEEE Transactions on Microwave Theory and Techniques* , vol. pp, no. 99, pp. 1-9, Nov. 2017.

Conferences

- **Chi Van Pham**, Vu Tuan Anh, William Tran, A. V. Pham and C. S. Gardner, "Wireless Energy Harvesting System Through Metal for Aerospace Sensor," submitted to *IEEE Transportation Electrification Conference and Expo Components, Systems, and Power Electronics (ITEC 2018)*, Long Beach, CA, Jun. 2018
- **Chi Van Pham**, B. Sawtelle, S. Imbach, A. V. Pham and Jironghe, "An automated fault detection program for multichannel bandwidth-limited system," *IEEE 89th ARFTG Microwave Measurement Conference (ARFTG)*, Honololu, HI, pp. 1-4, Jun. 2017.
- **Chi Van Pham**, A. V. Pham and C. S. Gardner, "Development of Helical circular coils for wireless through-metal inductive power transfer," *IEEE Wireless Power Transfer Conference (WPTC)*, Taipei, Taiwan, pp. 1-3, May 2017.
- **Chi Van Pham**, Binh Pham, A. V. Pham and R. E. Leoni, "A 461 bandwidth ratio balun on multilayer organic substrate," *IEEE MTT-S International Microwave Symposium*, Phoenix, AZ, pp. 1-3, May 2015.
- **Chi Van Pham**, Vu Van Yem, and Nguyen Xuan Quyen, "A Novel CPW-fed Fractal Antenna for UWB with Dual Notched-bands," *IEEE International Conference on Advanced Technologies for Communications (ATC)*, pp. 590-594, Oct. 2015.
- Vu Van Yem, **Chi Van Pham**, and Bernard Journet, "Novel high gain and broadband CPW-fed antennas with EBG for ITS applications," *IEEE International Conference on Advanced Technologies for Communications (ATC)*, pp. 451-456, Oct. 2013.
- Pham Toan Thang, **Chi Van Pham**, Vu Van Yem, and Bernard Journet "Simulation and experimental study of single-loop optoelectronic oscillator," *IEEE International Conference on Advanced Technologies for Communications (ATC*, pp. 680-685. Oct. 2013.
- **Chi Van Pham**, Vu Van Yem, and Bernard Journet, "Novel MIMO antenna Using Complementary Split Ring Resonators (CSRRs) for LTE Applications," *IEEE International Conference on Advanced Technologies for Communications (ATC)*, pp. 222-226, Oct. 2012.

Honors and Awards

- IEEE MTT-S Graduate Fellowship *Jan. 2016*
- PhD Student Sponsorship Initiative, MTT-S *May 2015*
- Spring 2015 ECE Program Fellowship *June 2012*
- Spring 2015 TA Fee ECE Fellowship *June 2015*
- Spring 2015, 2017 ECE Travel Grant *May 2015, 2017*
- Spring 2015 NRST Fellowship *Mar. 2015*
- Vietnam Education Foundation Fellow *Aug. 2012*
- First place in the "Student's Scientific Research Contest", HUST *June 2012*
- President's Student Leadership and Service Award, HUST *2009-2011*
- Ministry of Education and Training Annual Scholarship for excellent students *2007-2011*

Technical Skills

- CAD Tools: Circuit and Electromagnetic simulators: LTspice, Keysight: ADS and EMPro, ANSYS packages: Maxwell - HFSS and Multiphysics, CST Microwave Studio, Sonnet, AWR Microwave Office; PCB design: Altium Designer, OrCAD.
- Measurement: Anechoic chamber test, On wafer measurement (PNA/PNA-X),VNA, BERT, Sampling and Real-time oscilloscopes, TDR/High-speed modules, SPI/GPIB Programming
- Microfabrication: Electroplating
- Programming Languages: LaTex; C/C++; MatLab; Python
- Conference Reviewer: IEEE ATC (2014, 2015, 2016), IEEE ICCE (2014, 2016)
- Teaching Assistant: Circuit I (ENG17), Circuit II (EEC100)

References

Available upon request.