

# Tung Thanh Le

PO Box 40333, Lafayette LA 70504

<http://ttungl.github.io/>

Work Phone: 323-416-9214

Email: [ttungl@gmail.com](mailto:ttungl@gmail.com)

## Research Interests

- Computer architecture for many-core systems. Scalable, interconnect networks in distributed systems.
- Optimization. Machine learning. Cloud computing. Datacenter-on-chip.

## Education

**University of Louisiana at Lafayette**  
September 2013 – Present

Ph.D. candidate, **Computer Science** (expected: 2017)  
Advisors: Prof. Danella Zhao, Prof. Magdy A. Bayoumi  
Title: *Heterogeneous Computational Optimization, Efficient Algorithms, High-Performance for Exascale Computing Systems*  
M.S., **Computer Science**, 2016

**Kumoh National Institute of Technology**  
September 2011 – June 2013

M.E., IT Convergence Engineering  
School of **Electronic Engineering**

**Danang University of Technology**  
September 2002 – June 2007

B.E., with graduation thesis distinction, Automatic Control  
School of **Electrical Engineering**

## Professional Work Experience

**University of Louisiana at Lafayette, LA, Graduate Assistant**, August 2013 - present

**Hanwha Thales** (former: *Samsung Thales*), South Korea, **Research Intern**, August 2013 – December 2013

**Orion Technologies Co.**, South Korea, **Summer Intern**, June 2012 – August 2012

**Unilab, Danang Univ. of Tech.**, Vietnam, **Software Engineer**, May 2008 – August 2011

**Acronics Systems Inc.**, CA, USA, **PCB Engineer**, June 2007 – April 2008

## Honors & Awards

- NSF Graduate Research Fellowship, August 2013 – August 2015
- Best Paper Award – 14<sup>th</sup> Conference on Electronics & Information Communications.
- NIPA scholarship and NRF scholarship, South Korea, September 2011 – June 2013
- Samsung Thales scholarship for student travel, December 2012
- Excellent student in Danang University of Technology, January 2004 – June 2007
- One of four honor students achieving highest score on graduation thesis (4/500), June 2007

## Selected publications

- An Efficient Throughput Improvement through Bandwidth Awareness in Cognitive Radio Networks – *Journal of Comm. Networks*, 2014
- Distributed Cooperative Transmission for Underwater Acoustic Sensor Networks – *IEEE WCNC*, 2013
- BAR: Bandwidth-Aware Opportunistic Localized-Routing for Cognitive Radio Networks – *IEEE GLOBECOM*, 2012

## Projects

- **New Cinema Booking System** – *Database Management Systems*

Designed the database system using ER-diagram. Used MySQL and PHP to build the online booking system. Two modes for admin and users with friendly interface.

- **Airline Reservation System** – *Principle of Software Engineering*

Used the agile methodologies for developing software. Used Java unit testing to check the quality of the code.

- **Multi-class inheritance** – *Principle of Programming Language*

Used Scheme (Dr. Racket) to modify the interpreter for creating new functions of a language. In this work, multi-class inheritance is created. New instance generated is inherited to all the methods from joined classes. Used Scheme language for implementation.

- **802.11 DCF MAC Protocol simulation** – *Wireless Networking*

Implemented a 802.11 DCF MAC Protocol operation with Gilbert-Elliott channel model, RTS/CTS exchange, in different network topologies. Used C++ for implementation.

- **Pingo'in** – *Mobile Computing and Applications*

Created a Google maps android application. You can build your list of points of interest (POI) wherever you prefer in your map, the app will scan your map in preset range, if some POIs are within this range, they will be pop-up to show your saved interests in the area. Used Java, Eclipse for building the app, and used SVN for code management.

- **FPGA, ALU-16bits design** – *Computer Architecture*

Designed an ALU-16bits with basic operations using VHDL, Xilinx ISE, ModelSim. Verified by using Xilinx Spartan 3E FPGA starter kit.

## Computer skills

Expertise with Java, C/C++, Python, Matlab, Assembly; Also fluency with PHP, MySQL, HTML, Dr.Racket (Scheme), Google or-tools, CPLEX/AMPL, Verilog, VHDL, LaTeX.