

Education

- 2003-2008 Hanoi University of Science and Technology, Vietnam**
Bachelor of Electronics and Telecommunications.
Classification: Excellent.
GPA: 8.16 (Grading scale: 10).
Ranking: 1st out of 43 students in the class.
Top 1% of the School of Electronics and Telecommunications.
- 2015 Vietnam Institute for Advanced Study in Mathematics**
Summer School on Statistical Machine Learning - Professor Ho Tu Bao, Japan
Advanced Institute of Science and Technology and Associate Professor Nguyen Xuan Long, University of Michigan.
- 2015 Coursera**
Machine Learning – Associate Professor Andrew Ng, Stanford University.
Natural Language Processing – Professor Dan Jurafsky and Christopher Manning, Stanford University.
Probabilistic Graphical Models – Professor Daphne Koller, Stanford University.
Algorithms: Design and Analysis – Professor Tim Roughgarden, Stanford University.

Research experience

- 2017 Concatenative analysis-by-synthesis**
Extract speech feature in order to recognizing speech in noise by synthesizing it non-parametrically.
Tool: Tensorflow, Python
- 2017 Music composer classification**
Using different machine learning technique: Support Vector Machines (SVM), Logistic Regression (LR), K-Nearest Neighbors (KNN) to recognize music pieces from different classic composers for machine learning class project.
Tools: Python, Scikit-learn, music21
- 2016 Incorporating a speech model into multichannel spatial clustering**
Review literature and deploy baseline method from M. Souden, J. Chen, J. Benesty, and S. Affes, “An integrated solution for online multichannel noise tracking and reduction,” which base purely statistical information in the data to estimate the noise and speech probability distributions.
Tool: Matlab
- 2007 Project : Telecommunication Network Design**
Design telecommunication network by using Visual Basic.
Design Access Network: build CMST (Capacitated Minimum Spanning Tree) by using Kruskal’s algorithm.
Design Backbone Network with Mesh Network Topology Optimization Routing (Mentor).
Use Dijkstra’s algorithm to construct a Shortest Path Tree and Prim’s algorithm to build Minimum Spanning Tree.

- 2007 Project : Data Management**
Create a student data management program for Student Administration Department by using Visual Basics and SQL Server.
- 2008 Graduation thesis: IDS - Intrusion Detection System**
Work at Network Lab in Hanoi University of Science and Technology.
Analyze Internet threats and attacks.
Analyze IDS system structure and its operation.
Build a free security system on Linux with IDS (snort), firewall (shorewall), web-server (apache), data (mysql), web-based interface (webmin).
- 2008 Internship report: WLAN Security**
Work at Security Lab in FPT Company.
Analyze WLAN structure and threats.

Work experience

- 2016-present CUNY Graduate Center – PhD in Computer Science**
- 2011-2016 Texas Instruments - Technical Business Development Engineer**
Support customers in using TI semiconductor products and recommend solutions to build electronic devices.
Present technical seminars and organize microcontroller contests.
- 2008- 2011 Viettel Technologies - Technical Engineer**
Technical support in network and system for customers.
Prepare technical solutions and give technical training sessions to team members.

Skills and competencies

Programming languages: Python, Matlab, C, C++, PHP, HTML, Java, Visual Basic and assembly.
Query language: SQL.
Databases: MySQL, Microsoft SQL Server
Operating systems: Linux (Ubuntu, Fedora, Redhat)
Strong Mathematics (Probability, Statistics and Calculus), Computer Science, Network and Electronics background.