Group Presentation

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Overview

1. Background
   - Academic and education
   - Technical skill

2. Research fields
   - Before coming to ÉTS
   - Researching at ÉTS

Academic Background

- **2004** - **2009**: B. Sc in Electronic and Telecommunication Engineering from Hanoi University of Science and Technology, Vietnam
  - Study: Design and develop the vehicle tracking system using GPS and GSM technology
- **2012** - **2014**: M. Sc in Electronic and Telecommunication Engineering from Hanoi University of Science and Technology, Vietnam
  - Study: Design the smart antenna application for the Intelligent Traffic System (ITS)

Academic Background

- **2004** - **2009**: B. Sc in Electronic and Telecommunication Engineering from Hanoi University of Science and Technology, Vietnam
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- **6/2017** - **now**: Ph. D (in progress) in Electrical Engineering at ETS (since June 2017)
  - Study: DGA-1005

Computer skills

Primary Programming
C/C++, R, Python, Qt, bash shell, Yocto, and Matlab

Data Analysis System
Apache Hadoop, Mapreduce, Hive, Google Bigquery, SQL, and SPSS

Visualization
Tableau, Python, R, and Matlab

Documentation
Latex Studio (slide, poster, figure, flowchart, and document), Microsoft Office (word, excel, powerpoint, access)

Miscellaneous
Windows, Linux, Git, SVN, Agile

Project

R&D project

- The researcher of developing the smart antenna for Intelligence Traffic System at Hanoi University of Science and Technology
- The researcher of developing the GeoSocialBound framework at Dankook University
- The senior developer of researching the smart vehicle by using OpenCV at FPT Coporation

Implementation project

- The headend engineer of implementing the IPTV system for Vietnam Post Telecommunication Corporation
- The head office engineer of auditing the information security for Tien Phong Bank
- The project leader of developing the civil infrastructure platform based on linux kernel 4.4.51 at Renesas Coporation

Research fields

Before coming to ÉTS

- **Big data analytics**: Predictive analytic, data mining, text analytic,
- **Machine learning**: Supervised and unsupervised learning
- **Online social network analysis**: Networked structures in terms of nodes including social media networks, friendship, and collaboration graphs

Research fields

Researching at ÉTS – on progress

Focus on developing new algorithm to analyze big data generated by IoT-based 5G networks

- Big data analytics based on random matrix theory in IoT and 5G networks
  - Architectural framework to support big data in 5G networks: big signaling, traffic, location, radio waveform, and heterogenous data
  - Filtering and extracting right meta data from the whole data without discarding useful information
- Big data anlystics based on Mobile network data collection
  - Optimize, configure, and plan the network operations based on the stream data
  - Autonomous fault detection and localization solution for identifying coverage holes, sleeping cells, cells in outages, and network
  - Developing model of user and system behaviour

The End