

Hoang Duy Trinh – CV

@trinh.hoangduy@gmail.com  hdt Trinh.github.io

in linked.com/in/hdt Trinh  Castelldefels – Barcelona, Spain

i Born on 27th February 1991, Padua, Italy

Summary of Qualifications

Ph. D. candidate in Telematics Engineering at Polytechnic University of Catalunya, Barcelona, Spain. I received M. Sc and B. Sc. in Telecommunication Engineering at University of Padua, Italy. In 2016, I was awarded with Marie Skłodowska-Curie Action (MSCA) Fellowship in the European Horizon 2020. Starting from 2016, I'm a Research Assistant in the Communication Network Division at CTTC, Barcelona. I'm experienced in Service Integration (ESB) and Cloud SaaS. My research topics include Data Analytics and Machine Learning applied to Mobile Networks.

Education

Sep '16 Present	PhD Student, Telecommunication Engineering Polytechnic University of Catalonia, Barcelona, Spain
Sep '17 Feb '18	Visiting Academic, Dept. of Electrical and Computer Engineering University of Maryland, College Park, US
Oct '13 Oct '15	Master's degree in Telecommunication Engineering University of Padua, Italy (Final Degree: 110 over 110)
Oct '10 Jul '13	Bachelor's degree in Information Engineering University of Padua, Italy

Work Experience

Sep '16 Present	Research Assistant, CTTC, Barcelona, Spain <i>Main responsibilities:</i> <ul style="list-style-type: none">Research Assistant in the Communication Networks Division of CTTCMarie Skłodowska-Curie Fellow in the EU H2020 MSCA SCAVENGEDissemination of research activities and results at conference, talks and poster sessions
Oct '15 Sep '16	IT Consultant, SideUp Reply, Milan, Italy <i>Main responsibilities:</i> <ul style="list-style-type: none">AWS SaaS Warehouse Management for online e-commerce (e.g. Costco, Alibaba's Tmall)Web Services Integration (ESB) for Logistics ProcessDev Tools: Amazon AWS, Oracle Database, MuleSoft, Apache Mule

Publications

Classification of Mobile Services and Apps through Physical Channel Fingerprinting: a Deep Learning Approach

HD. Trinh, AF. Gambin, L. Giupponi, M. Rossi, P. Dini *IEEE Transactions on Mobile Computing (under review)*

Detecting Mobile Traffic Anomalies through Physical Channel Fingerprinting: A Deep Learning Approach

HD. Trinh, E. Zeydan, L. Giupponi, P. Dini, *IEEE Access* 2019

Urban Anomaly Detection by Processing Mobile Traffic Traces with LSTM Neural Networks

HD. Trinh, L. Giupponi, P. Dini, *CyberEdge: Edge Computing for Cyber Physical System Workshop, 2019 IEEE International Conference on Sensing, Communication and Networking SECON, Boston, USA*

Unveiling Radio Resource Utilization Dynamics of Mobile Traffic through Unsupervised Learning

A. Rago, G. Piro, HD. Trinh, G. Boggia, P. Dini, *2019 TMA: Network Traffic Measurement and Analysis Conference, Paris, France*

Mobile Traffic Prediction from Raw Data Using LSTM Networks

HD. Trinh, L. Giupponi, P. Dini *2018 IEEE 29th Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Bologna, Italy*

Analysis and Modeling of Mobile Traffic Using Real Traces

HD. Trinh, N. Bui, J. Widmer, L. Giupponi, P. Dini *2017 IEEE 28th Annual International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC), Montreal, Canada*

Skills & Knowledge

> AI - Deep Learning

- Sequence Models and Time-series prediction: *RNN, LSTM*
- Image Classification: *CNN*
- Reinforcement Learning: *Q-Learning*

> Python Libraries

- *Analysis and Visualization:* numpy, pandas, matplotlib, seaborn, plotly
- *ML and Modeling:* sklearn, keras, tensorflow, pytorch, xgboost

> Programming Languages

- *Advanced:* Python, MATLAB, Java
- *Intermediate:* R, C++, PL/SQL

> Wireless Communication

- *Mobile Network:* LTE, 5G
- Software-defined Radio

> DevOps Tools

- *IDE:* Jupyter NB, Eclipse, RStudio
- *DB:* Oracle, MySQL, MongoDB
- *other:* maven, git, SVN, Anypoint MuleSoft, Apache Mule

Certified Courses

> Udacity

- Machine Learning Engineer Nanodegree
- PyTorch Scholarship Challenge from Facebook

> Coursera

- DeepLearning.AI Specialization
- How Google does Machine Learning

Languages

> **Italian** - Mother Tongue

> **English** - Work Proficiency

> **Spanish** - Work Proficiency

> **Vietnamese** - Basic Proficiency