Tiffany Tuor

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EDUCATION

Dec 2016 – Present   **Imperial College London, London, United Kingdom**
Doctor of Philosophy (PhD) in Electrical and Electronic Engineering
- Research interests: distributed machine learning, communication networks, edge computing
- Advisor: Professor Kin Leung
- Award of scholarship from the U.S./U.K. International Technology Alliance (ITA) project

Oct 2015 – Oct 2016   **Imperial College London, London, United Kingdom**
Master of Science (MSc) in Communication and Signal Processing (with Merit)
- Modules included: Machine learning for Computer Vision, Information Theory, Probability and Stochastic Processes, Advanced communication Theory, Traffic Theory & Queuing Systems, Digital Signal Processing and Digital Filters
- Thesis title: 6 Degrees of Freedom (DoF) Object Pose Estimation using RGB-D Images

Oct 2014 – Oct 2015   **Imperial College Business School, London, United Kingdom**
Master of Science (MSc) in Financial Engineering
- Modules included: Advanced statistics, Stochastic Calculus, C++ for Finance
- Project: Pattern Recognition and Prediction in Equity Market using signal processing and machine learning techniques

Sep 2010 – June 2014   **Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland**
Bachelor of Science (BSc) in Communication Systems (Grade: 78%)
- Modules included: Computer Networks, Network security, Algorithms, Introduction to optimization and operations research, Object Oriented Programming
- Project: Implementation of a Bittorent Client with RSA encryption in Java

RESEARCH & WORK EXPERIENCE

May 2017- Aug 2017   **IBM Thomas J. Watson Research Center, New York, USA**
Intern in the distributed cognitive system group
- Worked on developing edge machine learning algorithms
- Developed an algorithm with the ability to train machine learning models from data distributed at multiple nodes - without sending the raw data to a central place - in an optimal way for a given amount of resources

Oct 2016 – Nov 2016   **Teralytics Pte. Ltd., Singapore**
Data Scientist Intern
- Analysed the commuter traffic in the Singapore tube stations using mobile data by applying stochastic modelling techniques
- Build visualization tools for the indoor cells identification in the tube stations

May 2016 – Sep 2016   **Imperial College Vision & Learning Lab, London, United Kingdom**
Master Research Student
- Comparative study of two state-of-the-art methods that perform 6DoF object pose estimation using RGB-D images
- Construction of a new, highly occluded, RGB-D dataset fully annotated and evaluation of the two approaches using the new dataset as a common denominator

| Sep 2011 – May 2012 | **Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland** |

Teaching assistant for undergraduate students in the course "Information Sciences"
- Delivered tutorial class and responsible for grading weekly assignments
- Content of the course: Shannon's entropy, Linear codes, Reed-Solomon codes, Number theory, Asymmetric Cryptography RSA

| May 2011 – Jul 2011 | **International Telecommunications Union (ITU), Geneva, Switzerland** |

Intern in the Terrestrial Applications Software Division (TAS)
- Contributed to the design and implementation of a database allowing the modelling of the inter-relationships between the various software modules developed by TAS
- Responsible for populating the database tables with the data collected from the developers in the team and building a comprehensive high level overview about the software developed by TAS

VOLUNTEERING EXPERIENCE

| Nov 2015 – Jun 2016 | **Code Club, London, London, United Kingdom** |

Part-Time Volunteer
- Taught children how to create animations, games and website

| Oct 2011 – May 2013 | **International Committee of the Red Cross (CICR), Geneva, Switzerland** |

Part- Time Volunteer
- Involved in an integration project for asylum-seeking children and young adults
- Taught the young adults to write French and basic arithmetic

IT SKILLS

Python, Java, C++, Scala, MATLAB / Linux

LANGUAGES

French: Native language / Italian: Fluent / English: Fluent (IELTS 7.5) / German: Basic

PUBCLIATION

- S. Wang, T. Tuor, T. Salonidis, K. K. Leung, C. Makaya, T. He, and K. Chan, "When edge meets learning: adaptive control for resource-constrained distributed machine learning," to be presented at *IEEE INFOCOM*, Apr. 2018. (acceptance rate: 19.2%)

- Tiffany Tuor, Shiqiang Wang, Theodoros Salonidis, Bong Jun Ko, Kin K. Leung " Distributed Machine Learning at Resource-Limited Edge Node: Demo", to be presented at INFOCOM 2018

CAMPUS ACTIVITIES

Imperial College London, London, United Kingdom
- Member of EEE Opportunities Committee and class representative for Communication and Signal Processing MSc students

Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland
- Council member of the Communication Systems faculty
- Member of Girls Coding (http://girlscoding.org)

INTERESTS   Semi-marathon, running, ski

References available upon request