Faheem Zafari

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EDUCATION

IMPERIAL COLLEGE LONDON

Ph.D. ELECTRICAL ENGINEERING Expected Aug 2020 | London, UK

PURDUE UNIVERSITY, USA

M.S. COMPUTER AND INFORMATION TECHNOLOGY May 2016 | West Lafayette, IN, USA GPA: 4.0 / 4.0

UET PESHAWAR

B.S. ELECTRICAL ENGINEERING June 2013 Peshawar, Pakistan GPA: 3.49 / 4.0

SKILLS

OPTIMIZATION THEORY

Convex and Non-Convex Problems: Centralized and Distributed Algorithms Duality Theory

GAME THEORY

Non-Cooperative Games Cooperative Games Bargaining Theory

INDOOR LOCALIZATION

Techniques: RSSI • ToF • TDoF Technologies WiFi • Bluetooth

MACHINE LEARNING

Supervised Learning: Linear Regression • Logistic Regression ANN • RNN • SVM Unsupervised Learning: K-means • PCA

PROGRAMMING

Over 5000 lines: Java • Matlab Over 1000 lines: C++ • Objective C Familiar: Python • MySQL

LINKS

Github://faheemzafari LinkedIn://faheemzafari Google Scholar://faheemzafari

EXPERIENCE

IMPERIAL COLLEGE LONDON | Ph.D. RESEARCHER

Sep 2016 - Now | London, UK

• Developing optimization techniques and game theoretic algorithms for resource allocation in communication networks.

US ARMY RESEARCH LABORATORY | VISITING RESEARCHER Aug 2017 | Adelphi, MD, USA

• Worked on optimization techniques for tactical environments.

PURDUE UNIVERSITY | GRADUATE RESEARCH AND TEACHING ASSISTANT

Aug 2014 - May 2016 | West Lafayette, IN, USA

- Designed algorithms for indoor localization and proximity detection using iBeacons.
- Developed docker based web applications for IEEE Cyber Security Project.
- Worked as a teaching assistant for graduate and undergraduate level courses.

NORTH CAROLINA STATE UNIVERSITY | VISITING RESEARCHER

June 2015 - July 2015 | Raleigh, NC, USA

 Implemented an end-to-end system for proximity based services using iBeacons.

CENTER FOR INTELLIGENT SYSTEMS AND NETWORKS RESEARCH | RESEARCHER

Mar 2013 - Sep 2013 | Peshawar, Pakistan

- Used machine learning for time series forecasting.
- Carried out research on Intelligent Transportation System and smart grids.

RESEARCH SUMMARY

Published Papers:

4 journal and 10 conference papers published so far in reputable venues.

• 5 Machine Learning Papers • 4 Indoor Localization Papers • 3 Optimization Theory papers • 1 Game Theory Paper • Over 260 citations • See google scholar for detailed list of publications

SELECTED PUBLICATIONS

- Zafari et al. (2018). "A Game-Theoretic Approach to Multi-Objective Resource Sharing and Allocation in Mobile Edge Clouds." Technologies for the wireless edge (Mobicom).
- Zafari et al. (2016) "Microlocation for internet of things equipped smart buildings." IEEE Internet of Things Journal. (Cited 66 times)
- Zafari et al. (2013) "A survey of intelligent car parking system." Journal of Applied Research and Technology. (Cited 54 times)
- Zafari et al. (2014) "Evolving recurrent neural network using Cartesian genetic programming to predict the trend in foreign currency exchange rates." Applied Artificial Intelligence.

AWARDS

- 2016 Ph.D Fellowship by EE Department and EPSRC (UK's NSF)
- 2015 Travel grant for IEEE Globecom Conference by Purdue University
- 2011 Global Undergraduate Exchange Fellowship
- 2008 5th/7000 students in Engineering Entrance Exam