Amin Ghazanfari

PhD Candidate and Researcher

A Ph.D. candidate in Electrical Engineering at Linköping University with a solid background in signal processing in wireless communications, mathematical analysis and programming. My main research interests include resource allocation in 5G-and-beyond systems and applying machine learning and deep learning for wireless communications.

amin.ghazanfari@liu.se

0736209597

Linköping University

scholar.google.com/citations?user=oHQOn-EAAAAJ&hl=en

linkedin.com/in/amin-ghazanfari-96b23842

aminamin9534

WORK EXPERIENCE

Research Assistant
University of Manitoba

05/2015 – 09/2016 *Winnipeg, Canada*

Achievements/Tasks

- Development of algorithms to enhance energy efficiency of cellular networks.

Advisor: *Prof. Ekram Hossain*

Research Assistant
University of Oulu

04/2013 – 04/2015 *Oulu, Finland*

Centre for Wireless Communications

Advisor: *Prof. Antti Tölli*

EDUCATION

PhD Candidate in Electrical Engineering
Linköping University

02/2017 – Present

MIMO systems, adv. detection and estimation, neural networks and deep learning, non-linear optimization

- Advisors: Prof. Emil Björnson and Prof. Erik G. Larsson
- Analysis, design and optimization of cellular architectures.
- Development of spatial resource allocation algorithms for new radio access networks utilizing Massive MIMO and D2D communications.
- Two IEEE transactions journal publications and two conference papers (ICASSP 2019, WSA 2018).
- (2017-Present) TA in Master Level courses: TSKS16 Signal Processing for Communication. TSDT14 Signal Theory. TSIN01 Information Networks.
- Supervised thesis: "Bluetooth LE Mesh Network in an Industrial Environment" by Mattias berglund. Linköping University and Toyota Material Handling Europe.

Licentiate of Engineering
Linköping University

10/2019

Thesis title

- Power Control for Multi-Cell Massive MIMO

M.Sc. (Technology) in Wireless Communication Engineering
University of Oulu

09/2011 – 01/2014 *4/5, Graduated with Distinction*

Thesis title

- Coordinated beamforming and power control for network controlled device-to-device (D2D) communication.

SKILLS

Deep Learning | Python | Machine Learning | Massive MIMO | Optimization Theory | Matlab | Detection and Estimation | Mathematical Analysis | Teaching | Signal Processing | 3GPP, 5G | CVX optimization tools | C++

PROJECTS

H2020 Marie-Curie ITN "5Gwireless" (02/2017 – 12/2018)

- Research on innovative architectures, wireless technologies and tools for high capacity and sustainable 5G ultra-dense cellular networks. Training activities on standardization and patents, EC funding and project management.

EWIN-D & CRUCIAL (04/2013 – 04/2015)

- Research on Energy efficient digital signal processing and resource management for D2D communications.
- Project secretary tasks.

AWARDS

Marie-Curie Research Fellowship (02/2017 – 12/2018)

Ericsson Research Foundation grant (05/2019)

M.sc, thesis grant, CWC, University of Oulu (2013)

Trainee grant award, CWC, University of Oulu (2012)

LANGUAGES

Persian	●●●●●
English	●●●●○
Swedish	●○○○○
Finnish	●○○○○

INTERESTS

Cross-fit | Hiking | Travelling | Gardening