Amir Hossein Fahim Raouf

Personal Data

Place and Date of Birth:	Tehran, Iran | 04 September 1990
Address:	Ozyegin University, Nisantepe, 34794, Istanbul, Turkey
Mobile:	+90 536 6451814
email:	amirh.fraouf@ieee.org
Scholar Profile:	Link
Personal website:	https://amir-rf.github.io/index.html/

Research Interests

My current research interest lies in applied machine learning with a particular emphasis on:

- Wireless Communications
- Content Delivery Networks
- Cooperative Coding and Communications
- Visible Light Communications

Education

Jan. 2018 – Present	M.Sc. in Electrical Engineering, **Ozyegin University**, Istanbul, Turkey Major: Visible Light Communications Thesis: "Underwater Quantum Key Distribution" Advisor: Prof. Murat Uysal
Sept. 2013 – Oct. 2016	M.Sc. in Electrical Engineering, **Yazd University**, Yazd, Iran Major: Telecommunication Engineering - System Thesis: "Caching based Video on Demand analysis in wireless network" Advisor: Dr. Jamshid Abouei
Sept. 2008 - Oct. 2012	B.Sc. in Electrical Engineering,**Isfahan University of Technology**, Isfahan, Iran Major: Telecommunication Engineering - System Thesis: "A 2D Barcode Recognition System Based on Image Processing and developing its Android" Advisor: Dr. Behzad Nazari
Sept. 2004 - May 2008	Diploma in Mathematics and Physics at **NODET**[*], Yazd, Iran * National Organization for Development of Exceptional Talents

Academic/Research/ Teaching Experiences

2018 - Present	Research Assistant at Communication Theory and Technologies (CT & T) *Ozyegin University, Electrical Engineering Department, Istanbul, Turkey*
FALL 2019	Teaching Assistant, Linear Algebra, Ozyegin University
SUMMER 2019	Teaching Assistant, Linear Algebra, Ozyegin University
SPRING 2019	Teaching Assistant, Linear Algebra, Ozyegin University
FALL 2018	Teaching Assistant, Calculus for Engineering, Ozyegin University
SPRING 2018	Teaching Assistant, Calculus for Engineering, Ozyegin University
2013 - 2018	Research Assistant at WIreless NEtwork Laboratory (WiNeL) *Yazd University, Electrical Engineering Department, Yazd, Iran*
SPRING 2015	Teaching Assistant, Engineering Mathematics, Yazd University
FALL 2014	Teaching Assistant, Electric Circuits II, Yazd University
SPRING 2014	Teaching Assistant, Electric Circuits I, Yazd University
FALL 2010	Teaching Assistant, Linear Control Systems, Isfahan University of Technology

The duties associated with these teaching assistant have included solving problems and student homework assignments and elaborating on the solution for pupils in the class, checking and marking their homework, and consultation with students. My exact duties were given by the instructor to whom I was responsible.

Publications

JOURNAL PAPERS

J[3] **A. H. F. Raouf**, J. Abouei, M. Jaseemuddin, and M. Uysal,*"LT Coding in Delivery Phase for Cache-based Wireless Networks,"* Submitted to **Physical Communication** (Jan. 2020)

J[2] **A. H. F. Raouf**, M. Safari, and M. Uysal, *"Performance Analysis of Quantum Key Distribution in Underwater Turbulence Channels,"* **J. Opt. Soc. Am. B**, *vol. 37, no. 2*, pp. 564-573 , 2020. (Link)

J[1] Z. H. Meybodi, J. Abouei, and **A. H. F. Raouf**, *"Cache Replacement Schemes based on Adaptive Time Window for Video on Demand Services in Femtocell Networks,"* **IEEE Transactions on Mobile Computing**, *vol. 18, no. 7*, pp. 1476–1487, 2018. (Link)

CONFERENCE PAPERS

C[3] **A. H. F. Raouf**, M. Safari, and M. Uysal, *"Multi-Hop Quantum Key Distribution with Passive Relays over Underwater Turbulence Channels"*, (Submitted on International Symposium on Communication Systems, Networks and Digital Signal Processing (CSNDSP))

C[2] J. Pourbemany, G. Mirjalily, J. Abouei, **A. H. F. Raouf**, "Load Balanced Ad-Hoc On-Demand Routing Based on Weighted Mean Queue Length Metric," in *Proc.* IEEE Iranian Conf. Elect. Eng., Mashhad, 2018, pp. 470-475. (Link)

C[1] **A. H. F. Raouf** and J. Abouei, "Cache Replacement Scheme Based on Sliding Window and TTL for Video on Demand," in *Proc.* IEEE Iranian Conf. Elect. Eng., Mashhad, 2018, pp. 499-504. (Link)

UNDER PREPRATION

J[4] **A. H. F. Raouf**, M. Safari, and M. Uysal, *"Monte-Carlo-based Channel Characterization for Underwater Quantum Key Distribution"*

Academic/Research/ Teaching Experiences

2018 - Present	Research Assistant at CT & T *Ozyegin University, Electrical Engineering Department, Istanbul, Turkey*
FALL 2019	Teaching Assistant, Linear Algebra, Ozyegin University
SUMMER 2019	Teaching Assistant, Linear Algebra, Ozyegin University
SPRING 2019	Teaching Assistant, Linear Algebra, Ozyegin University
FALL 2018	Teaching Assistant, Calculus for Engineering, Ozyegin University
SPRING 2018	Teaching Assistant, Calculus for Engineering, Ozyegin University
2013 - 2018	Research Assistant at WiNeL *Yazd University, Electrical Engineering Department, Yazd, Iran*
SPRING 2015	Teaching Assistant, Engineering Mathematics, Yazd University
FALL 2014	Teaching Assistant, Electric Circuits II, Yazd University
SPRING 2014	Teaching Assistant, Electric Circuits I, Yazd University
FALL 2010	Teaching Assistant, Linear Control Systems, Isfahan University of Technology

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Awards and honors

2019	TUBITAK scholarship, The Scientific and Technological Research Council of Turkey, Turkey
2019	Ozyegin Fellowship, Ozyegin University, Istanbul, Turkey
2018	TUBITAK scholarship, The Scientific and Technological Research Council of Turkey, Turkey
2018	Ozyegin Fellowship, Ozyegin University, Istanbul, Turkey
2018	Selected in Google Code Jam Qualification Round
2017	Selected in Google Code Jam Qualification Round
2015	Selected in Bayan Programming Contest Qualification Round
2008	Among Top %0.2 Students out of 320,000 Participants in the National Universities Entrance Exam (Konkoor), Iran

Computer Skills

Technical Softwares:	MatLab
Programming Language:	Java, C++, Python
Tools & IDES:	OpenCV, Keras, TensorFlow, Jupyter Notebook, Eclipse
Web Development Tools:	HTML

On-line courses

- Machine Learning by Stanford University on Coursera. Certificate earned at Thursday, August 1, 2019.

- Deep Learning by deeplearning.ai on Coursera. Certificate earned at September 22, 2019.

- Python 3 Programming by University of Michigan on Coursera. Certificate earned at October 4, 2019.

Membership, Volunteers and Services

2020	Reviewer of the IEEE Network Magazine
SEPT. 2019	Volunteer Organizer for the IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Istanbul, Turkey
2019	Reviewer of the IEEE Journal on Selected Areas in Communications, Special Issue on Multimedia Economics for Future Networks: Theory, Methods, and Applications
2016-PRESENT	Student Member of The Institute of Electrical and Electronics Engineers (IEEE)
2015	Member of "Attar public library", Produced audio books for blind children, Tehran, Iran
2011	Senior project manager on HIV/AIDS prevention project, Isfahan University of Technology, Isfahan, Iran
2010	Member of IUT Football team, Isfahan University of Technology, Isfahan, Iran

Work Experience

2014 - 2017	PSYCO, Yazd, Iran *Android Developer* I engaged in programming company *"PSYCO"* as a member of Android developing team. I contributed to develop some Android software such as an Android version for the marketers involved with the companies which use our accounting Windows software *"Pishro"*, *"Tourism"* with the cooperation of Yazd Cultural Heritage & Tourism Organization to provide all the required information for traveling in Iran such as hotels, hospitals, gas stations, finding the best route, weather condition, etc. and *"Office Automation"*.

Language Proficiency

English:	TOEFL (January 2017) Reading 27 | Listening 27 | Speaking 18 | Writing 25 | Overall 97 GRE (December 2019) Verbal 149/170 | Quantitative 168/170 | Writing 3/6 | Overall 320
Persian:	Native language

Research Collaborators

Prof. Murat Uysal, Professor, Department of Electrical Engineering, Istanbul, Turkey
IEEE Fellow

Dr. Jamshid Abouei, Associate Professor, Department of Electrical Engineering, Yazd University, Yazd, Iran
IEEE Senior Member

Dr. Majid Safari, Assistant Professor, LiFi Research and Development Centre, School of Engineering, Institute for Digital Communications, The University of Edinburgh, Edinburgh, United Kingdom
IEEE Member

Prof. Muhammad Jaseemuddin, Professor, Department of Electrical, Computer, and Biomedical Engineering, Ryerson University, Toronto, Canada
IEEE Member

Prof. Ghasem Mirjalili, Professor, Department of Electrical Engineering, Yazd University, Yazd, Iran
IEEE Member

Stanford | ONLINE

08/01/2019

Amir Hossein Fahim Raouf

has successfully completed

Machine Learning

an online non-credit course authorized by Stanford University and offered through
Coursera

Associate Professor Andrew Ng
Computer Science Department
Stanford University

Verify at coursera.org/verify/JBKXQXMX5635
Coursera has confirmed the identity of this individual and
their participation in the course.

coursera

LEARNING WITHOUT LIMITS · SPECIALIZATION CERTIFICATE

5 Courses

deeplearning.ai

Amir Hossein Fahim Raouf

has successfully completed the online, non-credit Specialization

Deep Learning

The Deep Learning Specialization is designed to prepare learners to participate in the development of cutting-edge AI technology, and to understand the capability, the challenges, and the consequences of the rise of deep learning. Through five interconnected courses, learners develop a profound knowledge of the hottest AI algorithms, mastering deep learning from its foundations (neural networks) to its industry applications (Computer Vision, Natural Language Processing, Speech Recognition, etc.).

Neural Networks and Deep Learning

Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization

Structuring Machine Learning Projects

Convolutional Neural Networks

Sequence Models

Adjunct Professor
Andrew Ng
Computer Science

coursera

LEARNING WITHOUT LIMITS · SPECIALIZATION CERTIFICATE

UNIVERSITY OF
MICHIGAN

5 Courses

Python Basics

Python Functions, Files, and
Dictionaries

Data Collection and Processing
with Python

Python Classes and Inheritance

Python Project: pillow, tesseract,
and opencv

10/04/2019

Amir Hossein Fahim Raouf

has successfully completed the online, non-credit Specialization

Python 3 Programming

This specialization teaches the fundamentals of programming in
Python 3. We will begin at the beginning, with variables,
conditionals, and loops, and get to some intermediate material
like keyword parameters, list comprehensions, lambda
expressions, and class inheritance. You will have lots of
opportunities to practice. You will also learn ways to reason about
program execution, so that it is no longer mysterious and you are
able to debug programs when they don't work. By the end of the
specialization, you'll be writing programs that query Internet APIs
for data and extract useful information from them. And you'll be
able to learn to use new modules and APIs on your own by
reading the documentation. That will give you a great launch
toward being an independent Python programmer.

Steve Oney
Assistant Professor
School of Information

Paul Resnick
Michael D. Cohen
Collegiate Professor
School of Information

Jaclyn Cohen
Lecturer
School of Information

Christopher Brooks
Research Assistant
Professor
School of Information

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