Amir Hossein Fahim Raouf

Personal Data

Place and Date of Birth:	Tehran, Iran | 04 September 1990
Address:	Nisantepe, Orman Sk. No:13, 34794 Cekmekoy, Istanbul, Turkey
Mobile:	+90 536 6451814
email:	amirh.fraouf@ieee.org
	amirh.fraouf@gmail.com
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 Communication Networks
- Information Theory
- 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

Publications

Journal Papers

J[3] | **A. H. F. Raouf**, M. Safari, and M. Uysal, *"Performance Analysis of Quantum Key Distribution in Underwater Turbulence Channels,"* Submitted to **Journal of the Optical Society of America B** (Sept. 2019)

J[2] | **A. H. F. Raouf**, J. Abouei, M. Jaseemuddin, and M. Uysal,*"Luby Transform Coding for Cache-based Wireless Networks,"* Submitted to **IEEE Wireless Communications Letters** (Aug. 2019)

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[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"*

C[3] | **A. H. F. Raouf**, M. Safari, and M. Uysal, *"Relay-Assisted QKD Over Long Underwater Channels"*

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

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.

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 %0.15 Students out of 500,000 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

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
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

COURSE CERTIFICATE

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

SOME ONLINE COURSES MAY DRAW ON MATERIAL FROM COURSES TAUGHT ON-CAMPUS BUT THEY ARE NOT EQUIVALENT TO ON-CAMPUS COURSES. THIS STATEMENT DOES NOT AFFIRM THAT THIS PARTICIPANT WAS ENROLLED AS A STUDENT AT STANFORD UNIVERSITY IN ANY WAY. IT DOES NOT CONFER A STANFORD UNIVERSITY GRADE, COURSE CREDIT OR DEGREE, AND IT DOES NOT VERIFY THE IDENTITY OF THE PARTICIPANT.

Verify at coursera.org/verify/JBKXQXMX5635

Coursera has confirmed the identity of this individual and their participation in the course.

5 Courses

- Neural Networks and Deep Learning
- Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization
- Structuring Machine Learning Projects
- Convolutional Neural Networks
- Sequence Models

09/22/2019

Amir Hossein Fahim Raouf

has successfully completed the online, non-credit Specialization

Adjunct Professor
Andrew Ng
Computer Science

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.).

Verify this certificate at:
coursera.org/verify/specialization/FEBDEZAER5CR

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**

UNIVERSITY OF MICHIGAN

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

Verify this certificate at:
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