

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 Technol-
	ogy

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 %0.2 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

- 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 | PSY

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 IFFF Fellow

Dr. Jamshid Abouei, Associate Professor, Department of Electrical Engineering, Yazd University, Yazd, Iran IFFF 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





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

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.).

Adjunct Professor Andrew Ng Computer Science

he online specialization named in this certificate may draw on material from couries stught on-compus, but the included nurses are not equivalent to on-compus courses. Participation in this online specialization does not certificate errelineant at is university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity or le former. 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 opency



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.

Stephen Oney Paul Resnich

Steve Oney Assistant Professor School of Information Paul Resnick Michael D. Cohen Collegiate Professor School of Information

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Jaclyn Cohen Lecturer School of Information Christopher Brooks Research Assistant Professor School of Information

The online specialization nomed in this certificate may drow on material from ocurses studyth on-compus, but the included courses are not equivalent to an-compus courses. Participation in this canibe specialization does not constitute exreditional his university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of he lacmer. Verify this certificate at: coursera.org/verify/specialization/HNF3Y2X75MFM