### Curriculum Vitae

#### Maedeh Rasoulzadeh



#### **CONTACT**

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### Education

#### M.Sc.1

2007-2010 Noshirvani University Of Babol, (Iran)

Electronics and Computer Department (Signals and system field)

#### M.Sc.2 (Student)

09/2022-Present Institute National Polytechnique de Toulouse (I.N.P) (France)

The École nationale supérieure d'électrotechnique, d'électronique, d'informatique, d'hydraulique et des télécommunications (ENSEEIHT)-SATCOM Program

### B.Sc.

2002- 2007 Shahid Beheshti University of Tehran (Iran)

Electronics and Computer Department

# Research Experience

### Researching on

- ✓ RF Systems
- ✓ ITU Radio Regulations
- ✓ Satellite Communications
- ✓ Market Research
- ✓ Frequency Interference
- ✓ Link Budgets
- ✓ Satellite Constellations
- ✓ Internet Of Things
- ✓ Smart Agriculture

- ✓ Bringing into use of frequency assignments for all NGSO satellite systems-milestone-based approach
- ✓ Biomedical image processing
- ✓ Application of Fuzzy Systems in Image Processing
- ✓ Edge detection
- ✓ Image Enhancement
- ✓ Pattern Recognition

### **Research Interests**

Experimental Research in field of:

- ✓ RF systems
- ✓ Market Research
- ✓ Satellite constellations
- ✓ ITU Radio Regulations
- ✓ Elimination of harmful Frequency Interference
- ✓ Swarm Intelligence
- ✓ Internet of Things
- ✓ Bringing into use of frequency assignments for all NGSO satellite systems-milestone-based approach

## **Tools & Technologies**

## **Space Software:**

- ✓ GIMS (Graphical Interference Management System)
- ✓ GIBC (Graphical Interference for Batch Calculations)
- ✓ SPACECAP (Space notification system PC capture)
- ✓ SPACEQUERY
- ✓ VGSO (VISUALISE GSO)
- ✓ ADS(Advanced Design System)

### **Engineering Software:**

- ✓ MATLAB, Simulink
- ✓ Hspice
- ✓ Pspice
- ✓ AutoCAD

### **General Software:**

- ✓ ICDL (Word, Excel, Access...)
- √ C++

## Languages

- ✓ English (Fluent)- IELTS Score:7.5
- ✓ France(A2)
- ✓ Persian (Mother Tongue)

## **Job Experiences**

- 1. University Lecturer, Hadaf Institute Of higher Education, Sary, Iran (2009-2012) Courses: Signals&Systems, Telecommunication Circuits Lab, Electrical Circuits Lab, Electrical Circuits (I,II), Applied Software in Electronics.
- 2. University Lecturer, Azad Islamic university of Behshahr, Iran (2012-2014) Courses: Electronics (I,II), Logical circuits, Electronic Circuit lab, Logical circuits lab
- 3. University Lecturer in Allame Mohaddes Noori Institute of higher Education, Noor, Iran (2013-2014)

Courses: Switching power supplies, Electrical circuits

- 4. University Lecturer in Azad Islamic university of Juybar, Iran (2010-2013) Courses: Signals & Systems, Logical circuits, Logical circuits lab, Electronics Lab
- 5. Expert of Coordination of communication satellite networks at Meraj Company(2013-2022)

# Main Responsibilities

In Meraj Company, I was responsible for a group of three researchers at my workplace. Our main responsibility was to look for novel methods for eliminating harmful frequency interference from communication satellite networks and proposing workable win-win solution to other companies to reach a fair agreement. As a team leader, I assigned responsibilities for my team members, supervise collaboration and cooperation on the assigned task and organize the results of their research and work to make the optimum decisions on the project.

As a project manager, I was also responsible for market research in the field of satellite communications to assess the market needs in terms of Bandwidth and different satellite services and made optimum strategies and decisions for possible design of future satellite networks. Everyday, I was negotiating with numerous companies and was responsible for preparing MOUs, RFPs, Agreements, etc.

I also conducted research about IOT networks especially for smart farming applications and satellite constellations to bring IOT services on satellite constellations. Further, I took part in ITU study groups mainly SG-4A about satellite services to keep up with the latest challenges and relevant regulations about satellite networks.

I held several speech and presentations to many communities to transfer my knowledge on satellite networks.

I also worked as a university lecturer for 4 years in different institutes of higher education and Azad universities in Iran. I taught main subjects (electrical circuits, signals and systems, communication circuits,...) to undergraduate students.

After gaining more theoretical knowledge about satellite networks, I am ready to put them in practice as now, I am more familiar with the different issues of satellite networks as a qualified engineer.

### **Publications**

- 1) Convincing documents for Radio Regulation Board of International Telecommunication Union (ITU) on BIU of Satellite filing in ITU. (*June2019*)
- 2) "Studies relating to the bringing into use of frequency assignments for non-GSO satellite systems, and consideration of a milestone-based deployment approach for non-GSO satellite systems in specific bands and services"- Annex 17 to Working Party 4A Chairman's Report-March 2018, International Telecommunication Union.
- 3) M.Rasoulzadeh, G.R.Ardeshir Behrastaghi "Blood Vessels Detection Using Fuzzy Inference System" Proceedings of the 2010 International Conference on Image Processing, Computer Vision, & Pattern Recognition, IPCV 2010, July 12-15, 2010, Las Vegas, Nevada, USA, 2 Volumes 183-186.
- 4) Maedeh Rasoulzadeh "Extraction of Blood Vessels in X-Ray Angiography Image Using Fuzzy Logic" International Journal of Engineering and Innovative Technology (IJEIT) Volume 1, Issue 4, April 2012.
- 5) M.Rasoulzadeh, G.R.Ardeshir Behrastaghi "Extraction of Bood vessels in X-Ray Angiography Image using Fuzzy Logic" International Journal Of Advanced Research in Computer Science, Volume 1, No.3, Sep –Oct 2010.

# **Honors & Accomplishments**

- Ranked 1212 among approximately 350,000 in the National Entrance Examination for Iranian Universities, Iran, 2002.
- Graduated from High School of National Organization of Upbringing of Exceptional Talents.
- Thesis Supervisor for students of Some Institutes of Higher education where I was a Lecturer.
- ➤ Instructing English in my workplace for 2 years before the global pandemic. -2019
- ➤ Presenting a course on "coordination of satellite Networks-Procedures and Regulations"-Satellite Research Institute-April 2018
- ➤ Presenting a course on" Regulatory Procedures for International Submission of orbital positions in ITU", World Space Week, Polytechnique University, Oct.2015.
- Lecturer of several subjects of ITU-R Study Groups
  - "Consequences for late notification under RR No. 11.49"-July 2013

- Feasibility study of "Telecommunication Satellite Application Project-Telemedicine-August 2013
- Technical and Regulatory aspects of assignments in FSS-PLAN service- Sep 2015
- "Application of Coordination Arc in Ka-band to determine coordination requirement between FSS and other satellite services"-August 2016
- "A guiding methodology for providing compatibility between ubiquitously deployed earth stations of the fixed and/or mobile adjacent areas for the cases described in the Tables of Appendix 7 of Radio Regulations"-August 2016
- "A review of SG-4A proposals on BIU of NGSO satellite networks"-Nov 2017

# **Workshops and Certificates**

- 1) Spatial applications of the Internet of Things (IoT) in transportation -25<sup>th</sup> National Geomatics Conference & Exhibition and 3<sup>rd</sup> National Conference on Geo-Spatial Information Technology Engineering- 21 Nov-23 Feb 2018, National Mapping Organization- Tehran-Iran (24hours)
- 2) IOT Applications- 4<sup>th</sup> IOT Conference and Exhibition (IOTex) -10 -11 Dec 2018, Milad Tower, Tehran, Iran (18 hours)
- 3) Organization Management Tools and Information Management ,10th Feb-6th Mar 2018 (14 hours)
- 4) Computer's Professional and Administrative Skills-26 May-21 June 2018 (22hours)
- 5) Administrative Letter Writing Skills-18 Jan-8 Feb 2021 (24 hours)

### Extracurricular

The Piano (Professional), Volleyball (Professional), Ballet Dance, Ping Pong, Hiking, Ice Skating, Movies, Books, Writing