Amirhossein Hashemi

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Education

M.Sc. in Electrical Engineering, Communications *2013 - 2015*

- *Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran*
- **GPA 16.93/20** *(* **3.6/4 in WES format** *)*
- **Thesis Title:***Analysis, Design, and Simulation Of Dielectric mm-Wave Waveguide for Interconnections Under Supervision of Prof.Abdipour*

B.Sc. in Electrical Engineering, Communications *2008 - 2012*

- *Urmia University, Urmia, Iran*
- **Thesis Title:** *Design and Simulation of a Low Noise Amplifier for Wireless Sensor Networks in 0.13 CMOS Process Under Supervision of Dr. Mousazadeh and Prof. Hadidi*

Work experience

Technical Director *of Electromagnetic and Antenna Lab, Tehran, IRAN 2017-Present*

- *Design, Simulation, Fabrication of Three Industrial and a One Research Projects in the field of: Antenna, LTE Advanced Mobile communication , Internet of Things, Bioelectromgnetics*

Technical Director *of Information and Communication Research Center, Tehran, IRAN 2015-2017*

- *Establishing Reference Laboratory with Collaboration of Communications Regulatory Authority, Device under test: Handheld personal Radios, cellphones, basestation equipment ... based on the European Telecommunications Standards Institute (ETSI)*
- *I have done researches and worked on Rapid PCB Prototyping machines Such as: LPKF ProtoMat M60 mill/drill circuit board plotter. LPKF ZelFlow reflow oven LPKF MultiPress II multilayer press*

Research Interests

- *Microwave/mm-Wave/THz Circuits and System Design*
- *RFIC*
- *Wireless Communications Transceivers(Design and Technology)*
- *Advanced Microwave and RF transceivers*
- *Integrated circuits and electromagnetic interfaces*
- *Active and Passive Antenna Design*

Selected Academic Courses

- *Optical Communication Circuits and Systems : 18.5/20*
- *Nonlinear Microwave Circuits Design : 17/20*
- *Modern Wireless Networks : 16/20*
- *Advanced Communications Theory : 17.75/20*
- *Active Microwave Circuits Design : 18/20*
- *Digital Signal Processing : 19/20*
- *Technical English for Electrical Engineering : 19.75/20*

Academic Course Projects and Workshops

Attending *New Trends in Substrate Integrated Circuits Workshop* *Winter 2015.*
- *by Prof. K.Wu , Millimeter-wave and Tera-hertz International Conference, Tehran , Iran*

Writing *a MATLAB program to Estimate Effective Bandwidth as Metric of Quality of service for Wireless Networks* *Fall 2014.*
- *Project for Modern Wireless Networks Course*

Writing *a MATLAB program to Analysis Performance of Optical Waveguides, Fiber Optics, and Optical Interconnections and Verified by COMSOL Multyphysic and Optiwave* *Fall 2014.*
- *Project for Optical Communication Circuits and Systems Course*

Writing *a program in MATLAB to Estimate Dielectric Constant with Nicholson-Ross-Weir Method*
Design WR90 Fixture for Measuring using Agilent Network Analyzer *Winter 2014*
- *Final Project for Microwave Measurement*

Designing *an Oscillator with Minimum Phase Noise and Specific Power and Analyzing its Nonlinear Performance using MATLAB and Advanced Design System (ADS).* *Spring 2014*
- *Project for Communication Circuits Course*

Designing *2 GHz LNA With 15.5 dB Gain and 1.1 dB NF and Simulating its Performance using Advanced Design System (ADS).* *Fall 2013*
- *Project for Active Microwave Circuits Design Course*

Attending *Strategic Planning Workshop* *Winter 2015.*
- *by Ministry of Education, Urmia, IRAN*

Simulating *Operational Amplifier with MNMC (Multipath Nested Miller Compensation)*
Fully Simulated with HSPICE.
- *Final Project for Electronics 3 course (BSc)*

Simulating *NE5234 Operational Amplifier*
Fully Simulated with HSPICE.
- *Final Project for Electronics 3 Laboratory (BSc)*

Presentations

Introduction *to Internet of Things* *Fall 2014*
Amirkabir University of Technology
- *Seminar*

Introduction *to Mixed Signal* *Spring 2013*
Amirkabir University of Technology

Academic Work and Experiences

Teaching Assistant *of Advanced Engineering Mathematic*
Amirkabir University of Technology, Tehran, Iran *Spring 2015*

Research Assistant *of Microwave/mm-Wave and Wireless Communication Lab(MMWCL)*
Amirkabir University of Technology, Tehran, Iran *2012-Present*

Teaching Assistant *of Advanced Engineering Mathematic*
Amirkabir University of Technology, Tehran, Iran *fall 2015*

Teaching Assistant *of Electric Circuits I*
Urmia University, Urmia, Iran *fall 2011*

Teaching Assistant *of Electric Circuits II*
Urmia University, Urmia, Iran *Spring 2012*

Teaching *Assistant of Fundamental of Electrical Engineering*
Urmia University, Urmia, Iran *Spring 2012*

Internship *at Microelectronic Research Center*
Urmia University, Urmia, Iran *Winter 2012*

Award & Honors

Semi-Finalist *in Mathematics National Olympiad competitions (high school) 2006*

Selected *Selected inventor in National Khwarizmi Competition in Tehran (High school) 2007*

Skills & Expertises

Engineering	*Proficiency in Ansoft HFSS, CST Microwave Studio, MATLAB, Advanced Design System (ADS) Cadence Virtuoso, Spectre RF, HSPICE,*
Test and Measurement:	*Proficient in Vector Network Analyzers,Signal Analyzer, Spectrum Analyzers, Signal Generators, Oscilloscopes*
General Software:	*LaTeX, Microsoft Office (Word, Power Point and Excel).*
Operating Systems:	*Expert in Microsoft Windows, LINUX Ubuntu.*
Programming Languages:	*Familiar in C, C++.*