

Hamed Rahimi Nasrabadi

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EDUCATION	<i>Bachelor of Science</i> , Electrical Engineering Sharif University of Technology, Tehran, Iran Major: Bioelectric Major: Physics Current GPA: 17/20(3.7/4) via 141 credits <i>Young Scholars Club (YSC)</i> Department of Physics, Young Scholars Club Theoretical and experimental preparation program for 44th International Physics Olympiad (IPHO)	2012-2017 2011-2012
	<i>Diploma in Mathematics and Physics</i> Salam Tajrish High School, Tehran, Iran GPA: 19.5/20	2008-2011

RESEARCH INTEREST

- System Neuroscience, Neural coding of sensory information
- Neural correlates of memory and consciousness
- Neural Engineering, BCI, Neuroimaging

RESEARCH EXPERIENCE

<i>Research Assistant</i> Institute for Research in Fundamental Sciences (IPM), Brain Engineering Research Center, Tehran, Iran Research Advisor: Dr. Reza Lashgari	Spring 2016 - present
<ul style="list-style-type: none">• Developing visual monitoring system with collaboration of Dr. Jose Manual Alonso, SUNY(USA).• Chaotic dynamics in the brain. Lyapunov exponent and time series analysis.• LFP and spike train relation in different layers of V1.	
<i>Research Assistant</i> Institute for Research in Fundamental Sciences (IPM), School of Cognitive Sciences, Tehran, Iran Research Advisor: Dr. Reza Lashgari	Spring 2015 - Spring 2016
<ul style="list-style-type: none">• LFP Modeling in visual cortex of primates with ARIFMA/ARIMA models.• Non-linear properties of SUAs, LFPs and computational models.	
<i>Research Assistant</i> Iran University of Science and Technology (IUST), Lashgari Lab Research Advisor: Dr. Reza Lashgari	Fall 2014 - Spring 2015
<ul style="list-style-type: none">• Response properties of neurons in primary visual cortex.• Image segmentation in MRI images.	

TEACHING EXPERIENCE	<p><i>Teaching Assistant</i> Spring 2016</p> <p>Microprocessor Systems, Dr. Khosro Hajsadeghi, Department of Electrical Engineering, Sharif University of Technology.</p> <ul style="list-style-type: none"> • Plan weekly assignments for class of 50 students. <p><i>Teaching Assistant</i> Fall 2015</p> <p>Fundamental of Neuroscience, Dr. Reza Lashgari, Department of Physics, Sharif University of Technology</p> <ul style="list-style-type: none"> • Plan final course projects for class of 40 students. • Teach basics of neural coding.
LABORATORIES SKILLS	<p><i>Assist in training macaque for attentional tasks</i></p> <p><i>Assist in Electrophysiological lab setup for recording MUA and LFP activity</i></p> <p><i>Assist in implementing a task manager software for controlling behavioral responses</i></p>
COMPUTER SKILLS	<p><i>Programming: MATLAB, C/C++, Verilog HDL</i></p> <p><i>Biomedical Image Processing Softwares: 3DSlicer, Mango</i></p> <p><i>PCB and Electronic Designs: Altium, OrcadPSPICE, Proteus, Cadsoft Eagle</i></p> <p><i>Typesetting: L^AT_EX, Microsoft Office</i></p> <p><i>Web Designing: HTML, PHP, Java Script</i></p> <p><i>Graphical and Designing Tools: AutoCAD, CorelDRAW</i></p>
HONORS AWARDS	<ul style="list-style-type: none"> • Gold medal in 24th National Physics Olympiad, Tehran, Iran 2011 • Fellowship at National Elites Foundation 2011-present • Exemption from Kunkur (National University Entrance Exam) 2012
ABSTRACTS CONFERENCES	<ul style="list-style-type: none"> • Alikhani M, Rahimabadi A, Rahimi Nasrabadi H, Zangane M, Davodnia V, Lashgari, R. Neural adaptation in primary visual cortex of awake primates . Chicago, IL: Society for Neuroscience, 2015 • Rahimabadi A, Alikhani M, Davodnia V, Zangane M, Rahimi Nasrabadi H, Lashgari, R. Method for analyzing neuronal response variability based on frequency response amplitude. Chicago, IL: Society for Neuroscience, 2015
SELECTED ACADEMIC PROJECTS	<ul style="list-style-type: none"> • Dr. Fardmanesh, Electronic Circuits in Biomedical Engineering course Spring 2016 Design and implement a neural recording system. • Dr. Hajipour, Computational Intelligence course Spring 2016 Implementing a NN program for BCI2003 competition. • Dr. Tavazoei, Non-linear Systems course Spring 2016 Bifurcation and chaos in Hodgkin-Huxley model. • Dr. Amjadi, Physics Dep. Fall 2015 Design and implement an ultrasonic glasses aim for helping blind people. (tested successfully in Raad Rehabilitation Goodwill Complex) • Dr. Farhadi, Linear Control course Spring 2015 Implementing a linear system in Matlab for controlling a non-linear oscillator. • Dr. Sarvari, Principle of Electronics course Fall 2014 Design and implementation of BJT audio amplifier. • Independent, Build a various types of robots including line follower, fire fighter and vision-based robots. Summer 2014,2013

RELATED COURSES

- Electronic Circuits in Biomedical Engineering, 18/20 Spring 2016
- Computational Intelligence, 18.7/20 Spring 2016
- Non-linear Systems, 16.7/20 Spring 2016
- Principle of Solid State Devices, 18/20 Fall 2015
- Digital Signal Processing, 18.9/20 Fall 2015
- Principle of Biomedical Engineering, 16/20 Fall 2015
- Microprocessor Systems, 19/20 Fall 2015
- Biophysics, 14.5/20 Spring 2015
- Biosensors, 18/20 Spring 2015

ADMINISTRATIVE EXPERIENCE

- *Member:* Executive committee, Sharif Student Competition, physics section March 2015, 2014

LANGUAGE

- English: Fluent
- Farsi: Native

REFERENCES