

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

- Research Assistant* Spring 2016 - present
Institute for Research in Fundamental Sciences (IPM), Brain Engineering Research Center, Tehran, Iran
Research Advisor: Dr. Reza Lashgari
- Developing visual monitoring system with collaboration of Dr. Jose Manuel Alonso, SUNY(USA).
 - Chaotic dynamics in the brain. Lyapunov exponent and time series analysis.
 - LFP and spike train relation in different layers of V1.
- Research Assistant* Spring 2015 - Spring 2016
Institute for Research in Fundamental Sciences (IPM), School of Cognitive Sciences, Tehran, Iran
Research Advisor: Dr. Reza Lashgari
- LFP Modeling in visual cortex of primates with ARIFMA/ARIMA models.
 - Non-linear properties of SUAs, LFPs and computational models.
- Research Assistant* Fall 2014 - Spring 2015
Iran University of Science and Technology (IUST), Lashgari Lab
Research Advisor: Dr. Reza Lashgari
- Response properties of neurons in primary visual cortex.
 - Image segmentation in MRI images.

TEACHING EXPERIENCE	<p><i>Teaching Assistant</i> Spring 2016 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 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> <i>Assist in Electrophysiological lab setup for recording MUA and LFP activity</i> <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> <i>Biomedical Image Processing Softwares: 3DSlicer, Mango</i> <i>PCB and Electronic Designs: Altium, OrcadPSPICE, Proteus, Cadsoft Eagle</i> <i>Typesetting: L^AT_EX, Microsoft Office</i> <i>Web Designing: HTML, PHP, Java Script</i> <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