

SHIRI SIMON

shirisimon85@gmail.com | 972-52-4479041 | 27 Gruzenberg St. Tel Aviv 6581134, Israel

SUMMARY

- 4+ years work towards PhD in Neuroscience. Research fields – voluntary movements, the motor system, conscious perception. Highly experienced with Neuroimaging including EEG and fMRI.
- Algorithm Developer at a startup working on consumer EEG neurofeedback.
- Skills: Research management, Experimentation, Data Analysis (Signal processing, Machine Learning, Statistics), Scientific Writing, Programming (Matlab and Python).

EDUCATION

2011 – Present	Ph.D. Candidate in Neuroscience, Direct Track Sagol School of Neuroscience and the School of Psychological Sciences, Tel-Aviv University
2008 – 2010	B.Sc. in Neuroscience University of Bar Ilan, Israel. <i>Magna Cum Laude</i> .

RESEARCH EXPERIENCE

2012 - Present	Dr. Roy Mukamel – Tel Aviv University <ul style="list-style-type: none">▪ Designed, conducted and analyzed results of <u>fMRI</u> studies investigating the functional properties of the motor system and resting state networks in predicting free choices. <u>Applied machine learning techniques on large scale data including classification and regression algorithms, clustering methods, dimension reduction procedures and permutation statistics.</u>▪ Designed, conducted and analyzed results of <u>EEG</u> studies investigating the functional properties of the mirror neuron system during unconscious perception of actions. <u>Applied signal processing tools, and spectral analysis.</u>▪ Planned and performed invasive ECoG and single unit recording experiments during clinical setting in epilepsy patients.▪ Developed an original data analysis procedure for fMRI information extraction. In collaboration with the laboratory of Prof. Rafael Malach at the Weismann Institute,▪ Managed undergraduate and postgraduate teams while they conducted and analyzed independent research projects, including implementation of novel analysis methods and tools.
Sep 2011 – Feb 2012	Prof. Talma Handler – Tel Aviv Sourasky Medical Center <ul style="list-style-type: none">▪ Conducted large-scale (~50 participants) fMRI experiment as part of Personality and Motivation systems research during doctoral program rotation.▪ Applied behavioral and fMRI data analysis using General Linear Models.
Mar – Aug 2010	Prof. Avraham Goldstein - Bar Ilan University <ul style="list-style-type: none">▪ Analyzed EEG data as part of Electrophysiological correlations to meditation research.

EMPLOYMENT

- 2015 - Present **Algorithm Developer - MyndLift Ltd., Tel Aviv**
 Develop algorithms for consumer EEG Neurofeedback that analyzes EEG signals in real time. Apply noise reduction techniques and building machine learning system testing multiple data analysis procedures and algorithms for information extraction from a limited number of sensors.
- 2014 – Present **EEG Teaching Laboratory - Department of Life Science, Tel-Aviv University**
 Lectured, accompanied and evaluated of students' projects and performance.
- 2008 - 2010 **Practical Teacher, Math and English - Rom Prat College, Tel Aviv**
 Tutored academic preparatory class for adults with learning disabilities.
- 2004 – 2006 **Military Service in Israeli Defense Forces (IDF)**
 The Center for Promotion of special Population, Education Corps
 - Recruit Service Commander, Managed and trained groups of soldiers
 - Developed training programs, conducted commanders' performance evaluations
 - Awards - The Center for Promotion of special Population Unit excellence award.

PUBLICATIONS

Gilron, R., **Simon, S.** & Mukamel, R. (2015) Neural Sources of Intention. In Eitam B. & Haggard P. (Eds.) *Human Agency: Functions and Mechanisms*. Oxford: U.K. Oxford University Press

FORTHCOMING

Simon S. & Mukamel R., *Power Modulation of EEG Mu and Beta Frequency Depends on Perceived Level of Observed Actions (under review)*

Reznik D.*, **Simon S***. & Mukamel R., *Increased readiness potential amplitude prior to self-generated actions with sensory consequences (in preparation)*

Simon S. & Mukamel R., *Differential Sensitivity within the Mirror Neurons System to Invisible Actions (in preparation)*

CONFERENCES PRESENTATIONS

- Oct 2015 **Simon S.**, & Mukamel R., *Encoding Action Affordances during Passive Observation of Graspable Objects*. Society For Neuroscience Annual Meeting, Chicago, USA
- Oct 2015 Reznik D.*, **Simon S***. & Mukamel R., *Increased readiness potential amplitude prior to self-generated actions with sensory consequences*. Society For Neuroscience Annual Meeting, Chicago, USA
- Aug 2015 **Simon S.**, & Mukamel R., *Differential Sensitivity within the Mirror Neurons System to Invisible Actions*, ELSC (Un)consciousness Conference, Jerusalem, Israel
- Jun 2014 **Simon S.**, Geron M. & Mukamel R., *Stronger Mu Suppression for Consciously Perceived Actions*. Organization Human Brain Mapping (OHBM) Conference, Hamburg, Germany

SCHOLARSHIPS AND AWARDS

- 2015 Travel Award - Sagol School for Neuroscience and Adams Super Center for Brain Studies
- 2013 – 2016 Yosef Sagol scholarship of Brain Research, Tel-Aviv University
- 2011 – 2012 Interdisciplinary Doctoral Program in Neuroscience (IDPN), Sagol School of Neuroscience scholarship
- 2008 The Dean's Award for Excellence in Studies

ADDITIONAL ACADEMIC CREDENTIALS

Mar – Jun 2015 **Project Management**, Recanati Business School, Tel-Aviv University
Jan – Apr 2015 **Machine Learning**, Stanford University through Coursera Inc.
Apr 2015 **Good Clinical Practice Fundamentals**, GCP Clinical Studies Ltd., Tel-Aviv University
Aug 2013 **Transcranial Current Stimulation Workshop**, By Dr. Roi C. Kadosh, University of Birmingham, England
Aug 2013 **Event Related Potentials Workshop**, By Dr. Steven J. Luck, University of Birmingham, England

VOLUNTARY EXPERIENCE

2015 - Present **'What Am I Missing' Venture**

- Build platform for scholars to increase access to most relevant publications in one's research.
- Work on web development (HTML, CSS, and JavaScript).

2003 – 2004 **Year of Service in The Agriculture Union Youth Movement**

- Managed an organization branch, supervise instructors, organized and managed large social events
- Tutored children with learning disabilities.

LANGUAGES

Hebrew – Native
English – Fluent
French, Spanish, Chinese - Proficient