Rick Farouni | Curriculum Vitae

Department of Psychology, The Ohio State University

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Fourth-year PhD student in quantitative psychology with a master's degree in statistics. Strong background in mathematical modelling, multivariate statistics, and Bayesian statistics. Strong technical and scientific computing skills.

Education

Academic Qualifications

The Ohio State University　　　　　　　　　　　　　　　　**Ohio, USA**
PhD in Quantitative Psychology　　　　　　　　　　　　　　*2012–Present*
Advisor: Professor Robert Cudeck

The Ohio State University　　　　　　　　　　　　　　　　**Ohio, USA**
Master of Science in Statistics　　　　　　　　　　　　　　*2012-2014*

The Ohio State University　　　　　　　　　　　　　　　　**Ohio, USA**
Master's Degree in Quantitative Psychology　　　　　　　　*2012-2014*

　　Thesis Project: *'Latent Variable Modelling of Categorical Item Responses
　　in a Hierarchical Bayesian Framework'*

The Pennsylvania State University　　　　　　　　　**Pennsylvania, USA**
Bachelor's Degree in Psychology　　　　　　　　　　　　　*2011-2012*

Course Projects

- **Multivariate Statistics** (STAT 7560): *'Retinotopic Mapping of the Human Visual Cortex Using Independent Component Analysis'*
- **Advanced Computational Statistics** (STAT 7730): *'Bayesian Analysis of Noisy Images Using Markov Random Fields'*
- **Statistical Consulting** (STAT 6750): *'Modelling Categorical Perception of Speech Sounds using Beta Regression'*

Awards and Fellowships

The Ohio State University
Graduate Student Conference Presentation Award　　　　　　　　　*2015*

The Ohio State University
The Center for Cognitive and Brain Sciences Summer Graduate Fellowship　　*2015*

　　Project Proposal: *'Decoding the Pixels of the Face Image from
　　the Voxels of fMRI BOLD Activity Patterns'*

The Ohio State University
The Social and Behavioral Sciences Summer Fellowship　　　　　　　*2014*

The Ohio State University
University Fellowship　　　　　　　　　　　　　　　　　　　　*2012*

Conference Presentations

Joint Statistical Meetings   **Seattle**
Poster Title: Across-Subject Predivtive Modeling of fMRI BOLD Responses to Faces   *2015*

Experience

The Ohio State University   **Ohio, USA**
Graduate Teaching Associate   *2013–2015*

Teaching Assistant for Psychology 2220: Data Analysis in Psychology

Test Preparation Instructor   **Moscow, Russia**
Instructor of the Graduate Management Admission Test (GMAT)   *2009-2012*

Teacher of English as a Foreign Language   **Moscow, Russia**
Teacher of General and Academic English   *2001-2009*

Computing and Language Skills

Programming and Software Skills

- **Programming Languages:** Proficient in numerical and statistical computing languages such as **Python**, **R**, and **Matlab**. Strong command of probabilistic programming languages such as **Stan**.
- **Tools and Software:** Experience with a variety of tools such as LATEX ,Linux OS, Git distributed revision control systems such as Github.
- **High Performance Computing:** Good knoweldge of running numerical analyses on the Ohio Supercomputer Center's main clusters.
- **Web Technologies:** Basic knowledge in using website development tools such as HTML, CSS, JQuery, and Jekyll.

Languages

- **Arabic :** Native Proficiency.
- **English:** Primary Language.
- **Russian:** Professional Working Proficiency.
- **Spanish:** Limited Working Proficiency.

Research Interests

- **Quantitative**
  - Multivariate Statistics and Latent Variable Models
  - Hierarchical and Nonparametric Bayesian Models

- **Methodological**
  - Multivariate Statistical Analysis of fMRI Activation Patterns
  - Statistical Analysis of Neural Time Series Data

- **Substantive**
  - Neural Coding and Decoding: How information about the sensory environment becomes coded by neural activity in an increasingly abstract hierarchy of representations
  - Object Recognition