

Seyed Morteza Najibi

morteza.najibi@biochemistry.lu.se . www.smnajibi.com

Postdoctoral Research Fellow in Statistics

Department of Biochemistry and Structural Biology

Lund University, Sweden



BIOGRAPHICAL	Date and place of birth: Apr. 1, 1986; Shiraz, Iran. Marital Status : Married, two children.	
WORK EXPERIENCES	Postdoctoral Research Fellow in Statistics Center for Molecular Protein Science, Lund University, Lund, Sweden Tenure-Track Assistant Professor Department of Statistics, College of Science, Shiraz University, Shiraz, Iran Tenure-Track Assistant Professor Department of Statistics, Faculty of Intelligent Systems and Data Science, Persian Gulf University, Busher, Iran	July. 2019 - present Sep. 2017 - June 2019 Aug. 2015 - Sep. 2017
RESEARCH POSITIONS	Non-Resident Researcher of Neuro-Statistics Neuroimaging and Analysis Group (NIAG), Tehran University of Medical Sciences, Tehran, Iran Visting Research Scholar Department of Mathematics, Computer Sciences and Statistics, Marquette University, WI, US	Oct. 2016 - June 2020 Mar. 2014 - Sep 2014
ADMINISTRATIVE POSITIONS	Head of Scientific Data Analysis Team (SDAT) Non-profit organization, Tehran, Iran. Special Advisor to the President Advising in implementing and evaluation of strategic plan, president department, Persian Gulf University, Iran.	Sep. 2015 - Present May 2017 - Nov. 2017
EDUCATION	Ph.D. in Statistics Department of Statistics, Faculty of Mathematical sciences, Shahid Beheshti University, Tehran, Iran. • Thesis Title: <i>Performance Improvement of Protein Alignment using Directional Statistics</i> Master in Statistics Department of Statistics, Faculty of Mathematical Sciences, Tarbiat Modares University, Tehran, Iran. Ranked 1st with GPA: 17.69/20. • Thesis Title: <i>On Protein Alignment via Statistical Shape Analysis</i> Bachelor in Statistics Department of Statistics, Faculty of Sciences, Persian Gulf University, Boushehr, Iran. Ranked 1st with GPA: 17.72/20. • Thesis Title: <i>Multivariate Regression and It's Analysis by SAS Software</i>	Sep. 2010 - Aug. 2015 Sep. 2008 - Sep. 2010 Sep. 2004 - Sep. 2008
EXTERNAL GRANTS	• Cognitive Sciences and Technologies Council of Iran ‘Clinical Neuroimaging Analysis Database and Computational Platform’. Role: Co-applicant, Site-PI. • National Institute for Medical Research Development “Predicting Postoperative Language Outcome using fMRI/DTI, Following Evaluation of Functional Language Mapping compared to Cortical Stimulation Mapping” Role: Co-applicant, Statistician.	2018 - 2019 2019- 2021

Last Update: April 2021

SELECTED
PUBLICATIONS

1. **Najibi S. M.**, M. Maadooliat, L. Zhou, Huang J. Z. and Gao X. (2017). Protein Structure Classification and Loop Modeling Using Multiple Ramachandran Distributions, *Computational and Structural Biotechnology Journal*, **15**, 243-254
DOI: 10.1016/j.csbj.2017.01.011.
2. M. Maadooliat, L. Zhou, **Najibi S. M.**, Huang J. Z. and Gao X. (2016). Collective Estimation of Multiple Bivariate Density Functions with Application to Angular-Sampling-Based Protein Structure Prediction, *Journal of American Statistical Association (JASA)*, **111** (513), 43-56, DOI: 10.1080/01621459.2015.1099535.
3. Haghbin, H., **Najibi, S. M.**, Mahmoudvand, R., Trinkka, J., Maadooliat, M. (2021). Functional Singular Spectrum Analysis. *Stat* ;10:e330. DOI: 10.1002/sta4.330.
4. Oliver, R. C., Potrzebowski, W., **Najibi S. M.**, Pedersen M. N., Arleth, L., Mahmoudi, N., Andre I. (2020), Assembly of Capsids from Hepatitis B Virus Core Protein Progresses through Highly Populated Intermediates in Presence and Absence of RNA, *ACS Nano*, 14, 8, 10226–10238, DOI: 10.1021/acsnano.0c03569

HONORS &
AWARDS

Scholarship Award of Iranian Ministry of Science and Technology

- Funding for visiting Marquette University, Milwaukee, US. 2014.
- Funding for Tenure-Track Assistant Professor at Persian Gulf University Bushehr, Iran. 2015-2017.

Ranking Award in 13th National Scientific Olympiad for bachelor students

- Ranked 2nd in six & seven geographic zone of Iran, Shiraz university, Iran Apr. 2008
- Ranked 5nd in final competition, Shahid Beheshti University, Tehran, Iran Jun. 2008

Outstanding Graduate Award

- Ranked 1st among B.Sc. students in statistics Sep. 2008
with GPA of 17.72/20, Persian Gulf University, Boushehr, Iran
- Ranked 1st among MSc. students in statistics Sep. 2008
with GPA of 17.69/20, Tarbiat Modares University, Tehran, Iran.

COMPUTER SKILLS

- Programming languages: R, practice of Rcpp, tidyverse (plyr/dplyr, ggplot2), shiny and dashr libraries, STAN and NIMBLE, practice of deep learning with Keras.
- Python, Practices of NumPy, SciPy, TensorFlow, and PyMC3.
- C and C++ (good).
- SQL (good)
- Linux: Web Server management, Kernel Virtual Machine (KVM), and Container (Docker).
- High Performance computing management SLURM, Condor, and PBS.
- Other: practice of LATEX, Sweave, Markdown and Rmarkdown for reporting, Git and Github.

SUPERVISION
EXPERIENCE

Ph.D. Students Co-Supervisor:

- Two Ph.D. Students in Biostatistics Nov 2017 - present
Research Subject: Bayesian modeling and non-parametric modeling on high dimensional manifold.

Ph.D. Students Assistant Supervisor (advisor):

- Tehran University of Medical Sciences, Tehran, Iran Dec. 2017 - March 2021
Three Ph.D. students in medical physics, psychology in MRI and fMRI data analysis.
- Department of Statistics, Shiraz University, Shiraz Feb. 2019 - Sep. 2020
One Ph.D. student in autophagy genes in Alzheimer's disease.

Master Students Co-Supervise:

- Department of Statistics, Shiraz University 2017-2019
Two master students of Statistics

LANGUAGE

- English: fluent; Swedish: basic; Persian: native;