Sepehr Saeedpour

sepehrsdp@gmail.com
+98 938 422 7574
Linkedin: linkedin.com/sepsad
Github: github.com/sepsad
Personal Page: sepsad.github.io

Education

- **University of Tehran** — Tehran, Iran
  B.Sc. in Electrical Engineering — 2017 - 2022
  - Thesis: Interindividual differences in Learning to Act or Avoid.
  - Recognized with the Best Undergraduate Thesis Award in ECE school.
- **Allameh Helli 1 High School** — Tehran, Iran
  Diploma in Mathematics and Physics Discipline — 2013 - 2017

  Affiliated with the National Organization for the Development of Exceptional Talents (NODET)

Publications

- **Saeedpour, S.**, Miandari, M., Deroy, O., Bahrami, B. (2023). Interindividual differences in Pavlovian influence on learning are consistent, Royal Society Open Science, doi.org/10.1098/rsos.230447
- Navidi, P., **Saeedpour, S.**, Miandari, M., Ershadmanesh, S., Bahrami, B. (2023). Prosocial learning: Model-based or model-free?, PLoS One, doi.org/10.1371/journal.pone.0287563

Research Experience

- **Ludwig Maximilians Universität München - Crowd Cognition Group** — Remote
  Research Assistant — June 2021 - Present
  Co-supervisors: Dr. Bahador Bahrami, Prof. Dr. Ophelia Deroy
  - Conducted a comprehensive pre-registered research (Link) on Pavlovian influence on instrumental learning.
    - Developed a Go/NoGo experiment using jsPsych (Link) and collected data through Amazon Mturk.
    - Analyzed the data and utilized reinforcement learning (RL) models to estimate subjects' parameters.
    - Wrote the manuscript, submitted it to a peer-reviewed journal and addressed reviewers' comments (Link).
  - Implemented RL models on data of individuals performing a 2-step task in a prosocial context to estimate model-based and model-free control parameters.
  - Currently, working on a project focused on eye gaze tracking in interactive environments (Link).
    - Developing eye-tracking software based on the Pupil Invisible API to analyze and visualize raw and real-time eye gaze data, and present results through heatmaps, scanpaths, and saliency maps
  - Supervising a student project investigating Pavlovian bias in group settings.
    - Managing the literature review and pre-registration submission (Link).
    - Developing computational models to explore groups' Pavlovian bias and examining its relationship with members' individual Pavlovian bias.
- **University of Tehran - NBIC Lab** — Tehran, Iran
  Undergraduate Research Assistant — Summer 2019
  Supervisor: Dr. M.R. Abolghasemi Dahaqani
  - Focused on signal processing techniques for EEG data feature engineering. The aim was to replicate the findings of this article (Link).

Honors and Awards

- **The Best Undergraduate Thesis Award.** ECE school, University of Tehran. (Link) — 2022
- **International Collegiate Programming Contest (ICPC) world finalist.** Bangladesh. (Link) — Nov 2022
  Coached the team "aFunnyRandomPhrase" from the Univesity of Tehran
- **Silver Medalist** in the 12th National Olympiad of Astronomy and Astrophysics (NOAA) — 2016
  Silver medals are awarded to about 10 people selected after a year of competition among over 10000 students.
- **4th & 11th Team** in the ACM ICPC regional contest — Respectively 2018, 2017

Work Experience

- **Venture Capital Team - Khalgh Servat Sarzamin Parseh** — Tehran, Iran
  Investment Analyst — Aug. 2022 - present
  - Analyzing early-stage startups using known frameworks such as pain points, and JTBD (job to be done).
  - Identifying candidates for investment within the allotted fund.
- **YUZ Games Studio - Cafe Bazaar** — Tehran, Iran
  Game Data Analyst — Apr. 2021 - Aug. 2022
  - Employed statistical and machine learning approaches to analyze YUZ games' users' behavior in the game and optimizing various aspects of the game and levels to improver gamers' experience.
- **People Analytics Team - Cafe Bazaar** — Tehran, Iran
  Human Resources Data Analyst — Jun. 2019 - Apr. 2021
  - Utilized data-driven approaches to analyze employees' profiles to optimise work conditions.

Teaching Experience

- **Teaching Assistant, ECE Department**
  University of Tehran
  - **Machine Learning**: Instructors: Prof. Nadjar Araabi & Dr. Abolghasemi Dahaqani — Fall 2020
  - **Engineering Probability and Statistics**: Instructor: Dr. Behnam Bahrak — Spring 2020
  - **Engineering Probability and Statistics**: Instructor: Dr. Abolghasemi Dahaqani — Fall 2019
- **Instructor, Astronomy & Astrophysics Olympiad** — 2017 - 2019
  Allame Helli 1 High school
  - Taught Data Analysis methods (e.g. linear models, Clustering) to students preparing for the National Olympiad in Astronomy & Astrophysics (NOAA).

Leadership and Membership Experience

- **Executive Director at CNCS 2019** — Winter 2019
  University of Tehran (Cognitive Neuroscience Competiton for Students)
  - Managed a team to execute the event.
  - Gathered speakers on different topics in cognitive science.
- **Performing Arts Club Vice Chair** — 2019
  University of Tehran
  - Managed the activities of Theater groups, shows and performances, workshops and events around Performing Arts in the University of Tehran.

Technical Skills

- **Programming**: Python, R, MATLAB, JavaScript, Sql, C++, Bash
- **Computational**: RL & ML algorithms, Model fitting/selection, Statistical Ineference
- **Software**: jsPsych, PsychoToolBox, Pandas, Statsmodels, NumPy, Scikit-Learn, TensorFlow, Keras
- **Miscellaneous**: Git, Jupyter Notebook, Linux, Windows, LaTeX, Microsoft Office (Word, Excel, Powerpoint)

References

- **Dr. Bahador Bahrami - bahador.bahrami@psy.lmu.de**
  Senior Research Scientist, Faculty of Psychology and Educational Sciences, Ludwig Maximilian University, Munich
- **Dr. Mohammad-Reza Abolghasemi-Dehaqani - dehaqani@ut.ac.ir**
  Assistant Professor, School of Electrical and Computer Engineering, University of Tehran
- **Prof. Dr. Ophelia Deroy - ophelia.deroy@lrz.uni-muenchen.de**
  Chair for Philosophy of Mind and Neuroscience, Ludwig Maximilian University, Munich