Yasaman Mohammadpour

ymoham15@asu.edu • (+1)480-852-8521

4701 W Thunderbird Rd, Glendale, AZ 85306

RESEARCH INTERESTS

- Data Science
- Neural Network
- Cognitive Science
- Natural Language Processing
- Machine Learning
- Psychology

EDUCATION

Arizona State University   ARIZONA, USA
  M.Sc. in Psychology   *Spring 2024 – present*
  - **GPA:** 4 out of 4

- Relevant Coursework: Behavioral Data Science, Quantitative Analysis, Professional Issues in Psychology

University of Tehran   TEHRAN, IRAN
  B.Sc. in Statistics   *2017 – 2022*
  - **GPA: 17.57/20** (3.54 out of 4)
    - Relevant Coursework: Regression, Continuous Multivariate Methods, Computational Statistics, Discrete Multivariate Methods, Time Series, Design of Experiment, Sampling Methods, Probability, Mathematical Statistics, Strategic Games, Fundamentals of Computer Science and Programming, Advanced Programming, Mathematics Analysis, Differential Equation

Salam High School NODET   TEHRAN, IRAN
  Diploma in Mathematics and Physics   *2013 – 2017*
  - **GPA:** 4 out of 4

RESEARCH EXPERIENCE

Research Assistant, Arizona State University   ARIZONA, USA
  Related Behavioral Data Science   *Spring 2024*
  - **Thesis:** Speech-based PTSD Prediction
  - Utilized NLP preprocessing methods including stopwords, lemmatization, tokenization, and sentiment analysis via transfer learning to process textual data.
  - Naive Bayes, Logistic Regression, Random Forest, and Neural Network to classify discussions on PTSD.

Research Assistant, Arizona State University   ARIZONA, USA
  Under supervision of Prof. Nicholas Duran   *Spring 2024*
  - **Thesis:** Analyzing Linguistic Interactions With Generalizable techNiques—A Python Library (using ALIGN library tested with LLMs: GPT, RoBERTa, Llama).

Research Assistant, University of Tehran   TEHRAN, IRAN
  Under supervision of Prof. Hedieh Sajedi   *Fall 2021 - Spring 2022*
  - **Thesis:** Applications of Artificial Intelligence in Opthalmology
  - Impact of Artificial Intelligence on Medical Education
  - Ethics of Artificial Intelligence in Medicine and Ophthalmology
  - Artificial Intelligence for Anterior Segment Diseases

Academic Teaching Experience

Teaching Assistant, University of Tehran — Tehran, Iran
Mathematical Analysis 1 — *Spring 2021*

Teaching Assistant, University of Tehran — Tehran, Iran
Continuous Multivariate Methods 1 — *Spring 2021*
- Supervise students in project research and development

Teaching Assistant, University of Tehran — Tehran, Iran
Differential Equations — *Spring 2022*

Teaching (over 2 years experience), Salam High School NODET — Tehran, Iran
Mathematics and Statistics — *Fall 2017-Fall 2019*
- Teaching over 20 private classes

Skills

- **Programming Languages**: Python (Proficient), R Program (Proficient), MATLAB (Proficient), MINITAB (Proficient), SAS (Statistical Software), STATA.
- **Tools/Packages**: Scikit-Learn, Numpy, Pandas, Matplotlib, PyTorch, TensorFlow, Jupyter Notebooks, Optimization Toolbox (MATLAB), SPSS.
- **Typesetting**: LaTeX, TeX, Microsoft Office, Google Docs.
- **Operating Systems**: Windows, Ubuntu.

Selected Course Projects

- **Predicting Parolee Recidivism Using Logistic Regression, Feature Engineering, Visualization**
  - Analysis and interpretation the dynamics of criminal behavior and rehabilitation. Tested on dataset: Georgia Parolee Recidivism Dataset — *Spring 2024*

- **Predicting Toxic Comment Classification Analysis using logistic regression, k-nearest neighbors, and naive Bayes classifiers**
  - Analysis and enhanced with cross-validation and tf-idf embeddings, to distinguish toxic from healthy comments: Wikipedia Talk Page Comments Dataset — *Spring 2024*

- **Market Segmentation Clustering Analysis via Elbow method and Silhouette scores**
  - Employed k-means and hierarchical clustering techniques on mall customer data: Mall Customer Segments Dataset — *Spring 2024*

- **The Performance of Knowledge-based Enterprises in Covid19 Pandemic**
  Strategic Games, University of Tehran — *Fall 2021*

- **Applications of Numpy and Pandas**
  Advanced Programming, University of Tehran — *Fall 2021*

- **Randomized Blocks and Latin squares and Complete Block**
  Design of Experiment 1, University of Tehran — *Fall 2021*

- **Application of Neural Networks in Game Theory**
  Strategic Games, University of Tehran — *Fall 2021*

- **Time-Series Forecasting of Covid19**

Strategic Games, University of Tehran *Spring 2021*

- **The Performance of PCA, CNN, LDA and QDA in Indian Pines Dataset**
  Continuous Multivariate Methods, University of Tehran *Spring 2021*

Courses and Certificates

**RCR - Graduate Student and Postdoctoral
Researcher Responsible Conduct of Research** Arizona State University
Spring 2024

Responsible Conduct of Research from CITI Program

Conflicts of Interest Arizona State University
Spring 2024

CITI Conflicts of Interest from CITI Program

IRB – Social Behavioral Research (Group 2) Arizona State University
Spring 2024

Human Research from CITI Program

Leadership of the open-door event Arizona State University
Spring 2024

Led the organization and execution of a lie detection event, directing setup
and coordination across three lab areas. Managed equipment preparation,
ensured operational readiness, and supervised lab members in assisting participants.

Principles of Economics Macroeconomics University of Tehran
Spring 2021

Learned about the effects of the business cycle on the wider
economy and what causes an economy to grow over a long period of time

Principles of Economics Microeconomics University of Tehran
Spring 2021

Learned about the set of fundamental principles to make predictions
about how individuals behave in certain situations involving economic
or financial transactions

Advanced Python University of Tehran
Fall 2021

Learned about the data visualization using matplotlib and Pandas

Data Manipulation using Pandas University of Tehran
Fall 2021

Learned about the data visualization using matplotlib and Pandas

Python for Economics University of Tehran
Fall 2021

- Learn essential packages for economics and data analysis
- Use Numpy library for numerical computing and data structure
- Use Matplotlib and seaborn library to visualize data

Honors and Awards

- Ranked among Top **5%** for two consecutive years, Department of Statistics for Graduate Study,
  University of Tehran, Iran, *Spring 2020 - Spring 2022.*

- Recipient of **Admission** for Bachelor's in Statistics at **University of Tehran**, the Oldest, Largest,
  and most Prestigious University in Iran, Spring 2022.

- Ranked among Top **2%** Contestants of the Nationwide University Entrance Qualification Exam
  (Konkour) among more than 140,000 participates, Iran, *Fall 2017.*

- Recipient of Full Bachelor's and Master's Tuition Waiver Fellowship

REFERENCES

- **Prof. Nicholas. Duran**, School of Social and Behavioral Sciences, Arizona State University, **Email: nduran4@asu.edu**.
- **Prof. F. Azizi**, Faculty of Mathematical Sciences, University of Tehran, **Email: Fa.azizi@alzahra.ac.ir**.
- **Prof. R. Naderloo**, Faculty of Biology, University of Tehran, **Email: rnaderloo@ut.ac.ir.**.
- **Prof. N. Milani**, Faculty of Mathematical Sciences, University of Tehran, **Email: nedamilani@alumni.ut.ac.ir**.