

# Fariba Khoshghalbavash, Principal Data Scientist

Innovative Data Scientist. 7 years of experience in gathering, cleaning, organizing, and modeling data to provide solutions or insight for technical and non-technical personnel. Advanced understanding of statistical, algebraic, and analytical techniques. Highly organized, motivated, and diligent with significant background in Machine Learning.

## Work History

present - **Principal Associate Data Scientist**

12/2021 *Capital One*

- Lead the application and validation of statistical and other mathematical methods to collect, organize, interpret, and summarize economic data to assist in decision-making and support the development of business strategy.
- Work in a key role within an interdisciplinary team to design, develop, and optimize customer-impacting products and experiences.
- Own statistical data modeling and related analytical projects throughout the lifecycle.
- Assess data quality, prepare data for processing, build, monitor, or validate statistical models, identify relationships and trends in econometric data, and analyze and interpret statistical data to support business decisions.
- Identify opportunities to apply statistics to improve business performance.
- Internalize business problems, translate them into actionable analyses or solutions, and prepare presentations of complex statistical concepts and research results to non-statistical audience.

12/2021- **Data Scientist**

12/2019 *CTRL, LLC (startup)*

- Prototyped 2 out of 3 main features of the product using statistical, algorithmic, and visualization techniques.
- Increased success rate of motion detection from %76 to %99 by designing and training a hybrid binary Autoencoder.
- Applied statistical and algebraic techniques to interpret key points from data.
- Detecting data anomalies and verifying data integrity and prepare it for analysis.
- Investigating innovative machine learning, signal processing, and statistical techniques for human activity recognition.
- Validating results and hypotheses by designing isolated experiments and calculating the appropriate metrics for evaluation.

08/2019- **Computer Vision R&D Intern**

05/2019 *Atos Syntel Inc.*

- Successfully localized content on parcel labels using novel regression techniques.
- Deployed image augmentation techniques and increased the sample size by 8.
- Exploited deep convolutional neural networks for text localization and information extraction from parcel label which increased accuracy by %16.

12/2019- **Graduate Research Assistant**

08/2016 *The University of Texas, Arlington*

- Proposed a novel approach to rank top 50 biomarker genomes among ~35k.
- Designed a multimodal deep network for binary classification that outperformed old methods such as SVM, Random Forest, and Logistic Regression.

## Education

08/2016- **Master of Science: Computer Science & Engineering**

12/2019 *The University of Texas at Arlington - Arlington, TX, USA*

09/2010- **Bachelor of Science: Applied Mathematics**

05/2015 *Sharif University of Technologies – Tehran, Tehran, Iran*

## Contact

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### WWW

<https://fariba-k.github.io/>

## Skills

Data preparation  
Data modeling  
Machine learning  
Statistical analysis  
Deep learning

Focused  
Vigilant  
Fast learner  
Multitasker

## Tools & Libraries

●●●●●  
Excellent

GitHub, Python,  
NumPy, pandas,  
scikit-learn, Plotly,  
matplotlib, seaborn,  
Jinja

●●●●●  
Very Good

Keras, TensorFlow,  
SciPy

●●●●●  
Good

R, SQL, MATLAB,  
Tableau