

Innovative Data Scientist. 5 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

12/2019- Present	Data Scientist <i>CTRL, LLC (startup)</i> <ul style="list-style-type: none">• 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.• Participating in daily scrums and providing detailed reports and plans
05/2019- 08/2019	Computer Vision R&D Intern <i>Atos Syntel Inc.</i> <ul style="list-style-type: none">• Successfully localized content on parcel labels using novel regression techniques.• Deployed image augmentation techniques and increased the sample size by 8.• Slashed computation %33 by modifying open-source techniques such as YOLO and EAST to train on a custom dataset.• Exploited deep convolutional neural networks for text localization and information extraction from parcel label which increased accuracy by %16.
08/2016- 12/2019	Graduate Research Assistant <i>The University of Texas, Arlington</i> <ul style="list-style-type: none">• 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.• Planned, prioritized, and executed research techniques, procedures, and tests.• Key reviewer for multiple academic data mining conferences such as BIBM, AAAI, CSPS, and Clinical Genetics.• Tutored students in various graduate and undergraduate analytics courses (e.g., Data Analysis & Modeling Techniques, Discrete Structures).

Education

08/2016- 12/2019	Master of Science: Computer Science & Engineering <i>The University of Texas at Arlington - Arlington, TX, USA</i>	GPA: 3.8
09/2010- 05/2015	Bachelor of Science: Applied Mathematics <i>Sharif University of Technologies – Tehran, Tehran, Iran</i>	

Publications

2019	ACM-BCB	Integrative Feature Ranking by Applying Deep Learning on Multi Source Genomic Data
	CSPS	The Effect of Integration Stage on Multimodal Deep Learning in Genomic Studies
2018	CSPS	Integrating Heterogeneous Datasets by Using Multi-modal Deep Learning

Contact

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Skills

Data preparation
Data modeling
Machine learning
Statistical analysis
Deep learning
Focused
Vigilant
Fast learner
Multitasker

Software & Libraries

<div><div></div><div></div><div></div><div></div><div></div></div> Excellent Python, NumPy, pandas, scikit-learn, matplotlib, seaborn
<div><div></div><div></div><div></div><div></div><div></div></div> Very Good Keras, TensorFlow, SciPy
<div><div></div><div></div><div></div><div></div><div></div></div> Good R, SQL, MATLAB, Tableau