Fariba Khoshghalbvash

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SUMMARY

Data Scientist with 3 years of academic and 2 years of industrial experience in Data Mining, Machine Learning. Proficient in Data Analysis, Statistical Learning, and Deep Learning. Well-versed in statistics and analytical tools.

SKILLS

- Python, Pandas, Numpy, Scikit-Learn, Keras, TensorFlow, Matplotlib, R, Tableau, SQL
- Deep Learning, SVM, KNN, Convolutional Neural Networks, Random Forest, Cross Validation, Unsupervised Clustering
- Data Processing, Statistic & Forecasting, Hypothesis Testing
- Fast Learning, Communication, Conflict Resolution, Time Management, Adaptability, Teamwork

PROFESSIONAL EXPERIENCE

Data Scientist

CTRL (https://ctrl.golf/) Dec 2019 – present

- Prototyped 2 out of 3 main features of the product using statistical, algorithmic, and visualization techniques.
- Decreased the error rate of motion detection from %24 to %1 by designing and training a hybrid binary Autoencoder.
- Detecting data anomalies and verifying the integrity of data used for analysis.
- Investigating innovative machine learning, signal processing, and statistical techniques for human activity recognition.
- Validating results and hypothesis by designing isolated experiments and calculating the appropriate success metrics.
- Participating in daily scrums and providing detailed reports of the last 24hrs results to set actions for the next 24hrs.

Computer Vision R&D Intern

Atos Syntel Inc. May 2019 – Aug 2019

- Developed machine learning regression techniques in the postal industry to localize addresses, content, etc. on parcel label.
- Deployed image augmentation techniques such as affine, padding, and cropping and increased the sample size by 8 times.
- Slashed computation %30 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 resulted in a more accurate product and increased the revenue.

Graduate Research Assistant

The University of Texas at Arlington Aug 2016 – Dec 2019

- Conducted advanced research and developing efficient algorithms to solve computational problems while making theoretical and fundamental contributions to statistical pattern recognition and machine learning.
- Published three papers on multimodal deep learning-based feature selection for biomarker discovery.
- Tutored students in various graduate and undergraduate analytics courses (e.g., Data Analysis & Modeling Techniques).
- Key reviewer for multiple academic data mining conferences such as BIBM, AAAI, and Clinical Genetics.
- Presented weekly reports of the research progress and enhanced collaboration among team members.
- Compiled comprehensive spreadsheets using Microsoft Excel for student grades to be easily examined.

EDUCATION

Master of Science, Computer Science & Engineering, University of Texas at Arlington, GPA: 3.8. Dec 2019

Bachelor of Science, Applied Mathematics, Sharif University of Technologies. Jul 2015

PUBLICATIONS

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

HONORS & CERTIFICATIONS

- Statement of Accomplishment in Statistical Learning**,** Stanford University 2015
- Computer Science & Engineering STEM Doctoral Fellowship recipient 2016