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EDUCATION

University of Arizona
Master of Science in Computer Science *2019 - 2021*
Doctor of Philosophy (PhD) in Systems and Industrial Engineering *2018 - Summer 2022(EXPECTED)*
Master of Science in Systems and Industrial Engineering *2016 - 2018*

Isfahan University of Technology
Bachelor of Science in Industrial Engineering *2010 - 2015*

TECHNICAL STRENGTHS

Computer Programming	Python, Java, Scala , C++, C, PERL, R, Prolog, SQL, HTML, CSS, JavaScript
Software & Tools	Docker, MlFlow, Tableau, Unix, Git, Scikit-learn, NLTK, spaCy, LaTeX, Jira
Deep Learning Frameworks	PyTorch, TensorFlow, DyNet, Keras

RELEVANT COURSES

Design and Analysis of Algorithms, Algorithms for Natural Language Processing, Neural Networks, Applications of Machine Learning, Principles of Machine Learning, Artificial Intelligence for Health and Medicine, Text Retrieval And Web Search, Computational Linguistics, Software Engineering, Advanced Operating Systems, Engineering Statistics, Fundamentals of Optimization, Stochastic Modeling, Applied Cyberinfrastruc, Enterprise Data Management, Advanced Business Consulting

WORK EXPERIENCE

Graduate Research Assistant, University of Arizona - Question Answering System *August 2019 - Present*

· Applying Computer Vision (CV) techniques to Natural Language Processing (NLP) task; the automatic augmentation of textual Question Answering with images from the web.
· Design of multimodal information by utilizing transformer models (i.e., BERT), object detection models (i.e., R-CNN), and CNN models (e.g., ResNet, VGG) for the textual question-answering task.

Data Science Research Intern, RedShred *March 2021 - August 2021*

· Machine learning and deep learning models were researched, analyzed, developed, tested, and deployed. Information extraction, natural language processing, and other text analysis methods, as well as computer vision techniques, have all been parts of these methodologies.

Teaching Assistant, University of Arizona *January 2019 - May 2020*

· Courses: Introduction to Engineering Probability and Statistics, as well as a Survey of Optimization Methods.

Graduate Research Assistant, University of Arizona - Machine Dialog System *May 2018 - August 2019*

· Natural language processing (NLP) techniques were used to create a smartphone app that can conduct a meaningful conversation with the user by simulating human talks. The project's data was based on real-world events, such as personal life and relationship experiences, as well as desires, hopes, and dreams.

Graduate Research Assistant, University of Arizona - ML for Health Care *August 2016 - May 2018*

· To explore relationships between physiological parameters of patients with traumatic brain injury, we used data analytics and Machine Learning (ML) approaches (e.g., MLP, Random Forest, SVM, voting, and bagging).

Student Consultant, Tucson International Airport *August 2016 - January 2017*

· This economic impact assessment was conducted on Tucson International Airport (TUS).
· Data from all airport tenants and connected businesses was gathered and examined. We devised a business plan for improving TUS's business processes and boosting the city's economic growth.

Teaching Assistant, Isfahan University of Technology *January 2014 - May 2015*

· Courses: Operations Research and Project Control.

PROJECTS

Music Generator *January 2020 - May 2020*

· Deep neural networks were used to create a music creation tool that automatically generates, extends, and stylizes imported MIDI music compositions.

· For this project, We used Amazon Online Services (AWS) to create a web user interface.

Mental State of Tweeter *August 2019 - December 2019*

· For the mental State of Tweeter task, I employed deep recurrent neural networks and transformer networks to develop a multilabel classification model. In the CodaLab competition, the designed model was placed in the top ten.

Recognizing Textual Entailment on SNLI Corpus *January 2019 - May 2019*

· To solve the Stanford Natural Language Inference (SNLI) challenge, I used simple but rapid machine learning models that achieved results comparable to deep learning network models.

Implementation of Log-File System on Virtual Flash Drive *January 2019 - May 2019*

· We used the C programming language to implement a Log-Structured File System (in Linux) on a virtual flash drive.

Domain Adaptation in Reading Comprehension *August 2018 - December 2018*

· For this study, I used the Stanford Question Answering Dataset (SQuAD 2.0), a reading comprehension database based on a collection of Wikipedia articles that included both answerable and non-answerable questions.
· For this project, PyTorch was used as the main Deep Learning tool, and the presented model included Domain Adaptation, LSTM, BiRNN, GRU, FFN, and Attention unites.

Programming Distribution Maps for Butterfly Species *August 2017 - December 2017*

· In an agile setting, completed a collaborative project with 12 team members.
· For computational processing, we used University of Arizona High-Performance Computing (HPC) servers, Docker, and Singularity Containers.

Design and Implementation of a Web-Based Database Application *August 2017 - December 2017*

· I worked on the frontend and backend of a database system that helps with day-to-day operations and decision-making.
· Oracle SQL Server and web-based development tools were used to create the database system.

PROFESSIONAL AND PERSONAL DEVELOPMENTS

Manager of the international students' sports activities club (ICAT) at the University of Arizona.

I was the manager of the University of Arizona's Computational Medicine and Informatics for Neurological Health (COMIN) Lab.

I have completed Six Sigma Green Belt training and Primavera Project Management certification.

Won the second place prize at the State Competition in Isfahan, Iran, for the basketball college championship.

In my spare time, I enjoy playing percussion music, participating in group activities and sports, scuba diving, and hiking.