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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 - Dec 2021(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, Tableau, Unix, Git, Scikit-learn, NLTK, spaCy, LaTeX, MS Office
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

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

· Researching, analyzing, developing, testing, and deploying machine learning and deep learning models. Methods such as information extraction, natural language processing, and other text analysis methods, as well as computer vision techniques.

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.
· Designing 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.

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

· Courses: Survey of Optimization Methods and Introduction to Engineering Probability and Statistics.

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

· Applied Natural Language Processing (NLP) methods to develop a mobile app that can have a meaningful conversation with the user by mimicking conversations of people. Data used for the project was based on experiences of various real people, including personal life and relationship experiences, desires, hopes and dreams.

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

· Applied data analytics and Machine Learning (ML) techniques (i.e., MLP, Random Forest, SVM, voting, and bagging) to study correlations between physiological characteristics of patients with traumatic brain injury.

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

· Conducted an economic impact study of the Tucson International Airport (TUS).
· Gathered and analyzed relevant data from all airport tenants and affiliated businesses. Created a business proposal for TUS business process improvement and amelioration of economic growth of the city.

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

· Courses: Operations Research and Project Control.

PROJECTS

Music Generator *January 2020 - May 2020*

· Developed music composition tool using deep neural networks to automatically generate, extend, and stylize imported music compositions in MIDI.

· Developed a web user interface for this project on Amazon Web Services (AWS).

Mental State of Tweeter *August 2019 - December 2019*

· Successfully completed the Mental State of Tweeter project, finishing at the top 10 in the CodaLab competition.
· Applied mulitilabel classification model using deep recurrent neural networks, and transformer networks.

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

· Applied simple but fast machine learning models to solve the Stanford Natural Language Inference (SNLI) problem, and achieve results comparable to deep learning network models.

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

· Implemented a Log-Structured File System (in Linux) on a virtual flash drive using C programming language.

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

· Deployed Stanford Question Answering Dataset (*SQuAD 2.0*), which is a reading comprehension database based on a set of Wikipedia articles containing both answerable and unanswerable questions.
· Used PyTorch as the main Deep Learning tool for this project, and Domain Adaptation, LSTM, BiRNN, GRU, FFN, and Attention Models in the presented model.

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

· Completed a collaborative project with 12 team members in an agile environment.
· Used University of Arizona High-Performance Computing (HPC) servers, Docker, and Singularity Containers for computational processing.

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

· Worked on frontend and backend of a database system that supports day-to-day business operations and decision making.
· Developed the database system using Oracle SQL Server, and web-based development tools (HTML).

PROFESSIONAL DEVELOPMENT

Lab manager for the Computational Medicine and Informatics for Neurological Health (COM-IN)

Chosen as the only institutional nominee for the Google PhD Fellowship Program from the University of Arizona. (Proposal currently under review by Google)

Project Management with Primavera Certification.

Manager of sports activities, Department of Industrial Engineering, IUT.

Won 2nd title award for basketball college championship, State Competition, Isfahan, Iran

Play percussion music, participate in group activities and sports, scuba diving, and hiking on free-time.