

Syed Rizvi

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EDUCATION

College of Natural Science and Mathematics, University of Houston, TX

Bachelor of Science in Computer Science

May 2023

Cumulative GPA: 3.97, Major GPA: 3.9

EXPERIENCE

HULA Research Laboratory, Houston, TX

September 2020 - Present

Computer Vision Research Assistant

- Coauthored research paper proposing MorphSet, a novel neural network architecture for case-level renal disease classification (paper accepted at MICCAI, pending press)
- Delivered oral abstract on MorphSet architecture and significance to over 100 medical professionals at the 2021 AI in Nephropathology Workshop in Amsterdam
- Developed custom labeling interfaces using React and the Labelbox JavaScript SDK, allowing for rapid fine-grained annotation of medical images
- Delivered presentation on custom labeling schemes using LabelBox platform to the computer vision research group at the University of Buffalo, NY
- Assisted in development of style initialization techniques to improve on existing style-transfer data augmentation algorithms for nephropathology datasets
- Created image processing Python scripts leveraging clustering libraries and binary masks for image tile extraction from kidney biopsy whole slide images

Phillips 66, Houston, TX

May 2021 – August 2021

IT Intern (Natural Language Processing)

- Worked in an Agile Kanban DevOps team environment to develop tools for document cognition
- Trained and deployed domain-specific entity recognition models on AzureML cloud services to perform information extraction on unstructured contract agreements
- Conducted text classification experiments for document categorization based on contract clauses
- Applied Microsoft Form Recognizer tool to analyze product scheduling documents
- Created Python scripts for text processing, cleaning, and dataset creation
- Created data visualization dashboards on machine status datasets using Alteryx and Tableau
- Delivered NLP project presentation to IT leadership members and Data Science team at Phillips 66

Taipei Medical University, Taipei, Taiwan

March 2021

Data Analyst Intern (Remote Work)

- Processed and merged wearable device data measurements taken from 18 Taiwanese patients using Python data management libraries
- Performed correlation analysis and visualizations between physical activity, circulation, fatigue, and sleep measurements taken over 9 months
- Explored time-lag cross correlations among patient data measures

INDEPENDENT PROJECTS

AWS Lex Bot Generator

January 2021

- Chatbot generation pipeline aimed at automating AWS Lex chatbot creation
- Helped configure AWS Lambda triggers to automatically start chatbot build process when a configuration file containing dialogue specifications is submitted to the app
- Placed 1st overall in the 2021 HP & AWS Bot-a-thon competition

- Developed using AWS Lex, Lambda, S3, DynamoDB, and React

Autoencoder Anomaly Detection

August 2020

- Machine learning model developed for anomaly detection in environmental sensor data taken from Amazon's Seattle Sphere conservatories
- Placed 3rd in the AWS & NVIDIA Environmental Hackathon (\$3000 award)
- Developed using AWS Sagemaker, Python, Pytorch, and Jupyter Notebooks

NutrientView Mobile App

July 2020

- Nutrient logging mobile app utilizing image recognition to track consumed meals
- Daily progress meters for 25 macro and micronutrients displayed on home tab
- Micronutrient Q&A chatbot integrated to give users insight on different nutrients
- Developed using React Native, IBM Watson image recognition, Azure bot service, Firebase, and the Edamam Nutrition Analysis API

StormReady Mobile App

May 2020 – June 2020

- Hurricane awareness mobile app aimed at preventative storm preparation and educating users about hurricane risk factors
- Implemented a location monitoring alert system with push notifications
- Developed using React Native, Firebase, and the AerisWeather API

TECHNICAL STRENGTHS

Libraries:	Pytorch, Keras, Numpy, Pandas, Scikit-learn, Jupyter Notebooks
Programming Languages:	Python, R, MATLAB, C++, JavaScript, Java
Cloud Services:	Azure ML, Azure DevOps, AWS Sagemaker
Data Processing Software:	Alteryx, Tableau

CERTIFICATIONS

Machine Learning

February 2021

Stanford University, Coursera Online Course

- Supervised and Unsupervised Learning Algorithms
- K-Means clustering, PCA, machine learning pipelines

Data Science Tools

June 2021

IBM, Coursera Online Course

- Python, R, SQL, IBM AI cloud service platform, Jupyter Notebooks

Data Science Methodology

June 2021

IBM, Coursera Online Course

- Overview of data science process and addressing business problems effectively
- Business understanding, dataset creation, modeling, and evaluation stages

HONORS AND AWARDS

Dean's Distinguished Scholars List, The University of Houston

Fall 2019 – Spring 2021

ACTIVITIES

Management Information Systems Student Organization

January 2020 – Present

Professional Development Committee Member

- Worked with a teams of 20+ committee members to perform 75 individual resume reviews leading up to recruiting season following resume guidelines set by the C.T. Bauer College of Business
- Delivered presentation on IT candidate development to over 50 undergraduates at a professional development workshop