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Rhythm M. Syed

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EXPERIENCE

Georgia Tech Research Institute, Methods & Analysis Development Branch August 2020 - Present
Graduate Research Assistant Atlanta, GA

- Building an opensource RDF framework for JupyterLab to construct knowledge graphs on natural language data
- Researching methods of machine learning and numerical optimization applied on semantic web technologies

AT&T Labs, Chief Data Office July 2019 - August 2020
Machine Learning Engineer Atlanta, GA

- Productionized an ML model with 93% text classification accuracy on legal contracts related to cellular towers
- Developed object detection models on drone imagery using R-CNN and YoloV3 for tower anomaly detection
- Enabled 2.3x faster document search for a supply chain analytics platform resulting in \$24 million in cost savings
- Processed 6 million contracts using natural language processing, latent semantic analysis, and TF-IDF embedding
- Performed iterations of model building and optimization with SVM, Random Forest, and LSTM neural networks

AT&T, Cricket Wireless May 2018 - August 2018
Software Engineering Intern Atlanta, GA

- Decomposed a monolithic architecture into microservices to increase modularity for the Ecommerce platform
- Automated testing on a network of 11 backend microservices using container orchestration and Docker Compose
- Migrated the production code base from AWS to an internal CI/CD platform to reduce cost for service hosting and increase scalability over 9 million subscribers

TECHNICAL SKILLS

Languages: Python, JavaScript, Nodejs, Java, Bash | **ML Frameworks:** PyTorch, TensorFlow, Keras, Scikit-learn
Data Sci: Jupyter, SQLite, MongoDB, OpenRefine, D3, Tableau | **Data Engr:** Hadoop, Spark, Scala, Databricks
MLOps: AWS, SageMaker, Azure, Docker, Kubernetes, CI/CD, Git | **Libraries:** NumPy, Pandas, Flask, OpenCV

PROJECTS

MoReco: A Tag-Based Movie Recommendation System

- Developed a tag-based recommender engine using cosine similarity deployed with Heroku on a D3.js front-end

Bayesian Inference Based Blur Removal from Images

- Created a pipeline to eliminate camera blur from images using Bayesian Inferencing and natural image statistics

Autonomous Driving Simulation using Deep Reinforcement Learning

- Replicated a method of autonomous steering in a race car game using deep reinforcement learning with DDQN

Health Monitoring Wearable with Sleep Detection

- Developed an embedded activity tracker using a real-time operating system and AWS(DynamoDB, IOT, Cognito)

EDUCATION

Georgia Institute of Technology August 2019 - Spring 2021
Master of Science in Computer Science | GPA: 3.75 Atlanta, GA

- Machine Learning Specialization: Systems for Machine Learning, Deep Learning for Text, High Perform Comp.

Purdue University August 2015 - May 2019
Bachelor of Science in Computer Engineering West Lafayette, IN

- Graduate Level Courses: Artificial Intelligence, Machine Learning, Compilers, Software for Embedded Systems

Certificates: Deep Learning Specialization (Deeplearning.ai), Machine Learning Engineer Nanodegree (Udacity)