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Rhythm M. Syed

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EXPERIENCE

Georgia Tech Research Institute, Methods & Analysis 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 information extraction 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, C++, Java, Bash **| ML Frameworks:** PyTorch, TensorFlow, Keras, Scikit-learn
Data Sci: Jupyter, SQLite, MongoDB, OpenRefine, D3, Tableau **| Data Engr:** Hadoop, Spark, Scala, Databricks
Cloud/DevOps: AWS, SageMaker, Azure, Docker, Kubernetes, CI/CD **| Libraries:** NumPy, Pandas, Flask

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 - May 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)