REED S. R. GRIMM

Machine Learning/Artificial Intelligence Engineer

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rsrgrimm | rsrgrimm

SKILLS

- Machine Learning
- Artificial Intelligence
- Data Processing
- Predictive Modeling
- Technical Communication
- Statistical Analysis
- Data Visualization

TOOLS

- Tensorflow
- Keras
- SQL
- Pandas
- Matplotlib
- Seaborn
- Microsoft Office

LANGUAGES

- Python
- Java
- C/C++

PRIOR EXPERIENCE

Project Engineer | UL
2016 – 2018

R&D Associate Engineer | TransEnterix, Inc.
2015 – 2016

PRIOR EDUCATION

Bachelors - Mechanical Engineering | North Carolina State University
2013 – 2015
- GPA: 3.76

Bachelors - Engineering Physics | Elon University
2010 – 2015
- GPA: 3.78

ABOUT ME

Enthusiastic and creative Master's student seeking a post-graduation, full-time position incorporating machine learning and artificial intelligence. Versed in diverse methods and architectures through industry experience and applied projects.

RELEVANT EXPERIENCE

Machine Learning Assistant | Syngenta

10/2021 – Present | Durham, North Carolina

- Collaborated with bioinformatics team to predict expression from CDS sequences
- Prepared and cleaned genomic data for feeding into predictive models
- Through hypothesis-driven exploratory analysis, discovered significant relationships between CDS sequences, protein structure, and trait expression
- Tuned transformer models to predict trait expression level across tissue types from CDS sequences, resulting in a 0.18 increase in F1-score over baseline despite heavily imbalanced, highly complex input data

EDUCATION

Masters - Computer Science | North Carolina State University

08/2020 – 05/2022 | Raleigh, North Carolina

- GPA: 3.89, Data Science Track
- Course Highlights: Automated Learning and Data Analysis, Neural Networks and Deep Learning, Artificial Intelligence 1 & 2, Social Computing and Decentralized AI

PROJECTS

Time-Series Deep Learning

- Competed with 40+ teams on terrain classification from lower-limb IMU data
- Built an LSTM deep learning model to classify terrain based upon sensor readings
- Achieved 3rd place in competition with a test macro average F1-score of 0.931

Generative Adversarial Network

- Trained a GAN on 8,000+ samples of abstract art and fine-tuned on a curated sample subset
- Determined that freezing 50% of GAN discriminator layers achieved 100% reduction of disliked styles, 70% higher preferred image generation over base model, and minimal overfitting artifacts despite limited tuning data

Time-Series Deep Learning

- Trained CNN models on mel-spectrograms extracted from Arabic dialogue incorporating wide emotion ranges
- Achieved 94% top-1 accuracy of whole-word classification, in spite of limited data and emotion-laden audio