

## REED S. R. GRIMM

#### Machine Learning/Artificial Intelligence Engineer

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Raleigh, North Carolina

in rsrgrimm

rsrgrimm

#### **SKILLS**

Machine Learning

Artificial Intelligence

Data Processing

Research

**Technical Communication** 

Statistical Analysis

Data Visualization

#### **TOOLS**

Tensorflow

Keras SQL

Pandas

Matplotlib

Seaborn

Microsoft Office

#### **ABOUT ME**

Enthusiastic and creative impending Master's graduate seeking a full-time position incorporating machine learning and artificial intelligence. Experienced in diverse methods and architectures through numerous applied projects and consultancy.

#### RELEVANT EXPERIENCE

#### Machine Learning Consultant | Syngenta

iii 10/2021 - Present

Durham, North Carolina

- Prepared and cleaned organism genomic data for feeding into predictive models
- Through data analysis, discovered significant, previously unknown 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

### **LANGUAGES**

Python

Java

C/C++

## **EDUCATION**

#### Masters - Computer Science | North Carolina State University

**=** 08/2020 - 05/2022

Raleigh, North Carolina

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

#### PRIOR EXPERIENCE

Project Engineer | UL 2016 - 2018

R&D Associate Engineer | TransEnterix, Inc.

2015 - 2016

## PROJECTS

#### Time-Series Deep Learning for Smart Prosthesis Terrain Classification

- Competed with 40+ teams to classify terrain types from lower-limb IMU data
- Built a long-short-term memory (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

# PRIOR EDUCATION

#### Bachelors - Mechanical Engineering | North Carolina State University

2013 - 2015

- GPA: 3.76
- Summa Cum Laude

# Bachelors - Engineering Physics | Elon University

2010 - 2015

- GPA: 3.78
- Phi Beta Kappa

#### Generative Adversarial Network for Curated Abstract Art

- Trained a GAN model on 8,000+ samples of abstract art
- Experimented with various fine-tuning methods using 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