Matt Serdukoff

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SUMMARY

I am a recent graduate with a bachelor's degree in computer science, specializing in data science, and I am seeking an entry-level position in machine learning, data science, natural language processing, and artificial intelligence. With hands-on experience and a deep passion for these fields, I am eager to contribute to their continuous expansion. My background includes developing innovative projects and solving complex problems, preparing me to make a meaningful impact in a professional setting.

PROFESSIONAL / TECHNICAL EXPERIENCE

TRAKUS: Wakefield, MA

System Operator (February 2021 – November 2022)

- Held the position of System Operator at Trakus, a dynamic role that ensures the seamless operation of the tracking system during high-pressure equestrian racing events. Primary focus was on maintaining the system's functionality and performing data acquisition even under tight schedules, guaranteeing that it would consistently deliver top quality data. By closely monitoring and troubleshooting, I contributed to the precision and reliability of said data acquisition. The experience here honed my ability to thrive in fast-paced environments while maintaining a commitment to delivering exceptional results.

HIME:

Cofounder/ML Development and Integration, <u>Hime Skin Analysis Application</u> (March 2024 – Present)

- In collaboration with another cofounder and third-party contractors helped build and integrate classification models with computer vision and generative AI functionality for a mobile and web application for AI assisted dermatological examination and evaluation, with the ability to interact with certified specialists.
- Utilized various libraries like Python, PyTorch, NumPy, Scikit, and Pandas in combination with development and MLOps tools such as MLFlow for experiment tracking, GitHub for version control, GitHub actions for ci/cd, docker for container packaging and deployment.
- Integrated the ML functionality into a web application with scalable micro-service architecture and optimized the proprietary Computer Vision model for local inference on mobile devices.

SELECTED PROJECTS:

Predicting Cardiovascular Disease using Machine Learning

- Using a dataset containing various symptoms and vitals, I wrote code in Jupyter Notebook that utilized Naïve Bayes, Logistic Regression, Linear Regression, and Decision Tree models to predict the presence of cardiovascular disease.

Learning a Children's Book using a Deep Averaging Network and Logistic Regression

- This project is from my Natural Language Processing class, it reads from a dataset that contains a diverse collection of text data from various children's books providing a valuable resource for NLP tasks tailored to young readers. Questions are categorized into four types: V (verbs), P (pronouns), NE (named entities), and CN (common nouns). For this project, only CN was utilized.

SKILLS

- C/C++, SFML
- Python, Pandas, NumPy, Matplotlib, PyTorch
- Machine Learning

- HTML, CSS
- Scikit-learn, Natural Language Toolkit
- MLFlow

- SQL
- Natural Language Processing
- Deep Learning

CERTIFICATES

- Neural Networks and Deep Learning by DeepLearning.AI
- Natural Language Processing by DeepLearning.AI

EDUCATION

UNIVERSITY OF MASSACHUSETTS LOWELL:

Bachelor of Science in Computer Science with Data Science concentration

ST. JOHN'S PREPARATORY SCHOOL:

High School Diploma

Lowell, MA May 2024 Danvers, MA May 2019

LANGUAGES

Fluent: English and Russian Proficient: Italian & German Basic: Turkish and Hebrew