NICHOLAS WARD

Data Scientist

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SKILLS

Python | SQL | C++ | Flask | Tableau | Statistics | NLP | Scikit-Learn | TensorFlow | Git | SwiftUI | LaTeX | Machine Learning | Deep Learning | PySpark

CERTIFICATES

- Natural language Processing in TensorFlow
- Convolutional Neural Networks in TensorFlow
- Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning
- Fundamentals of Visualization with Tableau
- Fundamentals of Scalable Data Science
- Convolutional Neural Networks
- Structuring Machine Learning Projects
- Impoving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization
- Neural Networks and Deep Learning

LANGUAGES

English: Native

Swedish: Basic

ABOUT ME

A skilled Data Scientist with 3+ years of experience, a robust portfolio of personal projects, and a Bachelors in Computer Science and Engineering, proficient in Python, SQL, and data analytics, with a passion for designing robust machine learning models to solve complex problems. Proven ability to translate complex data-driven insights into strategic business decisions, eager to bring these skills and my drive for impactful data solutions to a progressive organization.

EXPERIENCE

Data Science / Software Engineer | NXTechnologies

01 2023 – CURRENT | Reno, NV

- Achieved a substantial 98% reduction in runtime for the company's audio processing algorithm by spearheading system optimizations. Implemented advanced techniques in the software (C), such as interpolation, conversion from doubles to fixed point, and loop unrolling.
- Developed a rules based system for intelligent audio processing improving product quality.
- Actively involved in business planning and product development discussions.

Data Science Intern | Panasonic - Tesla Gigafactory

05 2022 – 08 2022 | Reno, NV

- (POC) Devised and built a recommendation system designed to reduce machine downtimes. This system leveraged a custom-built ETL pipeline, an ML model, and the Flask framework to deliver actionable suggestions to operators.
- Maximized model effectiveness by diligently remedying a highly flawed dataset using data cleansing techniques with tools such as spaCy and NLTK.
- Created an Ensemble model that forecasted machine downtimes using operator text input.

Research Assistant | University of Nevada, Reno

08 2020 – 05 2022 | Reno, NV

- Developed a deep learning approach for pick and place tasks with an Aubo Robotic Arm. The project involved implementing object detection and pose detection using OpenCV and YOLO.
- Leveraged genetic algorithm optimization for hyperparameters within OpenAI deep reinforcement learning environments, yielding a significant, albeit variable, enhancement in task convergence speeds.
- Created custom OpenAI deep reinforcement learning environments.

PROJECTS

Automated Resume Matching System using BERT |

- Designed and implemented a job matching system using Flask and PyTorch, leveraging a BERT model for text classification tasks.
- Presented real-time matching progress and results in a user-friendly Flask application.

Predictive Trading Bot System |

- Implemented a real-time trading bot using MetaTrader API, executing trades and performing backtests in Python.
- Utilized Scikit-learn in Google Colab to create a predictive model, determining bot trade outcomes based on market conditions.
- Conducted data analysis and visualization using Seaborn, providing key insights for model refinement.

EDUCATION

Bachelors in Computer Science and Engineering | University of Nevada, Reno

08 2018 – 12 2022 | Reno, NV

- Minor: Mathematics