Nelson J. Diaz

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Education

Texas Tech University - Lubbock, Texas **Aug 2021 – Dec 2024**
Bachelor of Science in Computer Science, with Minor in Mathematics
***GPA:** 3.86*

John Cabot University - Rome, Italy **May 2023 – Jun 2023**
Study Abroad
***Class:** Intro Artificial Intelligence*

Work Experience

Data Annotation – Remote **Jan 2025 – Present**
AI Response Rater (Part-Time)

- Evaluated Large Language Models' responses to coding or math related prompts, rating their performance on various axes such as workflow, efficiency, logic, functionality, etc. to provide insightful feedback.
- Displayed a deep understanding of various frameworks and languages to accurately verify the models' solutions and provide suggestions on improvements from years of experience.
- Composed clear, well-structured justifications for ratings to assist AI engineers in improving models, contributing to a 15% improvement in model quality.

Samsung Austin Semiconductor – Austin, Texas **May 2024 – Aug 2024**
Software Engineer Intern

- Developed and deployed a trend monitoring tool in Python capable of identifying unusual behaving tools and excursion events within the Fab, reducing time to resolve by 80%.
- Collaborated extensively with cross-functional teams to analyze workflows and identify ways to enhance efficiency via home-developed tools, strengthening intra-team communication.
- Frequently provided detailed project updates to team leaders in scheduled meetings, resulting in final project presentations to senior leadership, increasing team visibility and stakeholder confidence in project impact.

Projects

Steam Gaming Trends Analysis **Feb 2025 – Mar 2025**

- Developed an interactive Streamlit dashboard to track the monthly Top 225 Steam Games, using statistical analysis and data visualizations to the evolving industry trends and deliver actionable insights for developers.
- Designed and implemented a fully automated data pipeline using Python, BeautifulSoup, and the Steam API to collect game performance and player feedback metrics, structuring the data for seamless integration into the Streamlit dashboard.
- Applied machine learning techniques, such as RandomForestRegressor, to analyze tag combinations in top Steam games, achieving an MSE of 0.03 and an R^2 of 0.6.

Brain Tumor Classification AI **May 2023 – Jun 2023**

- Designed a deep learning model using Scikit-Learn and TensorFlow capable of classifying tumor types within MRI scans into four categories, achieving a 97.7% validation accuracy.
- Preprocessed a dataset of 3,000+ MRI images, applying data augmentation, normalization, and one-hot encodings to improve model generalization.
- Optimized training with Adam optimizer, learning rate scheduling, and model checkpoints; evaluated final performance using confusion matrices and classification reports.

Technical Skills

Programming Languages: Python, SQL, R, Rust
Libraries: PySpark, NumPy, Pandas, TensorFlow, Scikit-Learn, Streamlit, Docker
Cloud & DevOps: Microsoft Azure, Azure DevOps, GitHub Actions, CI/CD
Version Control: GitHub, Git, GitLab
Software Development Lifecycle: Agile Methodologies, Scrum