Emeron Marcelle

Doctor of Information Technology

PROFESSIONAL SUMMARY

Doctoral Scholar of Information Technology with over 7 years of experience in the IT sector. Passionate about machine learning and computer vision innovation. Skilled in Scikit-Learn, TensorFlow, and Python, with a proven track record in creating models, automating processes, and improving system performance. Committed to continuous innovation and advancing technology solutions.

LINKS

- LinkedIn: https://www.linkedin.com/in/emeron-marcelle-22457186/
- **GitHub:** https://github.com/Emeron16/UCSD/tree/main
- **Portfolio:** https://sites.google.com/view/emeronsmachinelearning/home

Education

- **Doctorate in Information Technology**Capella University | **Oct 2022 March 2025**
- Machine Learning Engineering Bootcamp UC San Diego Extension | May 2024 - Oct 2024
 - o 6-month intensive course in artificial intelligence and machine learning technologies and methods.
- Master's in Computer Science Brooklyn College | Aug 2017 - Jun 2019
- Bachelor's in Computer Information Systems
 New York City College of Technology | Aug 2011 Jun 2015

Technical Skills

Jupyter Notebook, Python, Batch Scripting, TensorFlow, Keras, Scikit-Learn, Pandas, Matplotlib, Machine Learning, Git, SQL, GitHub, Google Colab, AWS

Professional Experience

AI Expert Contributor

Snorkel AI, Remote | Jan 2025 - Present

 Developed graduate-level AI research questions requiring deep domain expertise, complex reasoning, and nuanced understanding, contributing to the development of complex AI models.

Founder

The Affinite, New York | Nov 2024 - Present

- Designed and deployed scalable infrastructure using AWS EC2, S3, CloudFront, and RDS, ensuring high availability and efficient data storage.
- Built robust web applications with Flask/Python, PostgreSQL, and modern JavaScript frameworks, integrating real-time data processing and dynamic relationship visualizations.
- Implemented role-based authentication, optimized database queries, and leveraged caching for faster page loads and reduced latency.
- Designed algorithms for smart relationship inference and automated notifications, with a focus on performance and user experience.

Systems Support Engineer

Celonis, New York | Jan 2022 - May 2024

- Conducted data analysis in ServiceNow, boosting operational efficiency by 10%.
- Automated over 2,000 devices with Intune and Kandji, significantly cutting setup time.
- Configured network infrastructure, enhancing system performance and uptime.
- Managed IT environments with Active Directory and Azure, reducing unauthorized access.

Internships

Machine Learning Engineer

A&J Luxury Event Planning, New York | Nov 2024 – March 2025

- Implemented automated services like Zapier to document service interactions for future data analysis.
- Developed and deployed machine learning models to predict optimal posting times, target audiences, and platforms for maximizing social media engagement.

 Designed and implemented data pipelines for collecting, cleaning, and preprocessing data from social media analytics tools, CRM systems, and external sources like seasonal trends and competitor activities.

Projects

Project 1: Smart Manufacturing Adoption Barriers in U.S. SMEs

- Goal: Quantitatively analyze barriers hindering the adoption of Smart Manufacturing technologies, specifically robotic process automation (RPA), within U.S. Small and Medium-sized Enterprises (SMEs).
- Data Science & Software Engineering:
 - o **Data Preparation:** Utilized Pandas and NumPy within the Python programming language to clean, transform, and prepare survey data received from SurveyMonkey into a numerical format suitable for analysis.
 - o **Model Development:** Employed JASP, a statistical software tool, to conduct correlational analysis and assess the impact of identified independent variables on the adoption of Smart Manufacturing technologies.
- **Teamwork & Communication:** Collaborated effectively with a mentor and cohort members to develop key data analysis goals, ensuring close attention to detail and fostering open communication throughout the project.

Project 2: Hand Gesture Recognition for Enhanced User Interfaces

- Goal: Develop high-accuracy hand gesture recognition models to enhance user interfaces across various interactive platforms, including smart TVs, virtual reality, and industrial machinery.
- Model Development:
 - o Employed PyTorch, a deep learning framework, to build and train robust hand gesture recognition models.
 - Utilized Google Cloud services, such as Google Colab, for model development and training, leveraging their computational resources (e.g., GPUs) to accelerate the process.
- **Software & Programming Languages:** Proficient in Python programming and cloud development frameworks for efficient model training and deployment.
- **Cloud Platforms:** Leveraged AWS cloud resources (e.g., GPU instances) to accelerate the data processing and analysis pipelines.
- **Production Systems & Maintenance:** Focused on improving model accuracy to foster intuitive and reliable control systems across interactive platforms, ensuring the robustness and maintainability of the developed solutions.