Jose M Serra Jr.

http://serrajoportfolio.com/

New Jersey Institute of Technology

Master of Science in Data Science GPA: 3.125

Kean University

Bachelor of Arts in Mathematical Science Data Analytic Option GPA: 3.328

PROGRAMMING SKILLS

Languages: Python, R, C#, Java, SQL, Excel, Batch, PowerShell, C++

Technologies: AWS, .NET Framework, TensorFlow, Keras, PyTorch, Sci-kit learn, Git, GitHub, Bitbucket, NumPy, SciPy, Pandas, Plotly, Matplotlib

EXPERIENCE

Panasonic

Software Engineering Intern

• **Software Development**: Developed applications in C#, Batch and PowerShell that communicate with the OS of the computer to communicate with the hardware of the computer. Developed web applications using Python, Django, JavaScript, CSS, HTML that included a dashboard, and using Scikit-Learn a summarization tool.

Kean University

Research and Teaching Assistant

- AI Researcher: Using CNNs and Facebook's DETR, investigated weather phenomena known as ITCZs. Employed RNNs and BERT transformers to explore language translation and next word generation in text.
- **Teaching Assistant**: TA for the Computer Science Department's TECH 1010 and for the AI4ALL Kean cohort intro course.

Projects

ITCZ Research: Convolutional Neural Networks hyperparameter analysis using weather data.

Panasonic EZ Configurator: Facilitated installation of software onto customer units leading to an increase in customer retention by 10%

MNIST Image Recognition: Developed a custom CNN for identifying handwritten numbers in MNSIT dataset **Search Application**: Developed a application that allows to navigate the web using Chrome and Edge.

Hash Checker: Developed a utility that verifies the hashes for products using the Windows certutil.exe tool.

Hearts UCI Dataset: Programmed a Machine Learning algorithm that performed a regression analysis on the dataset QGIS NLP Summarizing Tool: With a team I project managed the development of a tool that would be used in Supply Chain to better trace issues in distribution and product malfunctions

PUBLICATIONS

J. Serra, ..., "Validation of AI models for ITCZ Detection from Climate Data", Proceedings of the IEEE Conference on Data Science and Information Technology (DSIT '22), Shanghai, China, July 22-24, 2022

N. Tellez, J. Serra, ..., "An Assure AI Bot (AAAI bot), International Symposium on Networks, Computers, and Communications (ISNCC '22), IEEE, Shenzhen, China, July 19-22, 2022, pp. 1-5.

N. Tellez, J. Serra, ..., "Gauging Biases in Various Deep Learning AI Models", 2022 Intelligent Systems Conference (IntelliSys '22), In: Aria, K. (eds) Intelligent Systems and Applications, vol 544. Springer, https://doi.org/10.1007/978-3-031-16075-2_11

CERTIFICATIONS

- Amazon Certified Cloud Practitioner: Earned from Amazon Web Services Certification and Training
- Google Data Analytics: Earned from Coursera.
- DeepLearning.AI TensorFlow Developer: Earned from Coursera.

Newark, NJ Sept. 2023 – May. 2025 Union, NJ Jan. 2021 – May. 2022

Union, NJ

Newark, NJ

Nov. 2022 - Present

Sept. 2021 – Dec. 2022