Jose M Serra Jr.

http://serrajoportfolio.com/

Email : joseserra803@gmail.com

Mobile : +1-973-816-9341

EDUCATION

New Jersey Institute of Technology — Newark, NJ
Master of Science in Data Science — *Sept. 2023 – May. 2025*

Kean University — Union, NJ
Bachelor of Arts in Mathematical Science Data Analytic Option — *Jan. 2021 – May. 2022*

Passaic County Community College — Paterson, NJ
Associate of Science in Physical Science — *Sept. 2018 – Dec. 2020*

EXPERIENCE

Panasonic — Newark, NJ
Software Engineering Intern — *Nov. 2022 – Present*

- **Application Developing**: Developed applications in C#, JavaScript and Python for internal, and external usage by increasing program efficiency by 10% by utilizing PowerShell scripting to better handle exceptions, and installation of applications. Using libraries like Flask, Pandas, NumPy, and Plotly.js developed a web application with dynamic visualizations increasing response time to customer issues by 20%.
- **Application and BIOS Testing**: Tested UWP, and .NET Applications developed by Panasonic on Panasonic TOUGHBOOKs resulted in increase of customer support company responsive by 2%, as well as custom BIOS for specific customers ensuring that the device functions as desired leading to customer retention.
- **Product Development Life cycle**: Collaborated with stakeholders, engineers, and developers on several projects. Participated in requirements gathering, design, development, and testing phases. Involved in project schedules, and resources to deliver products in a timely manner.
- **Data Analysis**: Used Microsoft's Power BI and Excel to construct visualizations for management surrounding customer data.

Kean University — Union, NJ
Research and Teaching Assistant — *Sept. 2021 – Dec. 2022*

- **Convolutional neural networks, Recurrent Neural Networks, and Transformers**: Published three research papers in the field of Artificial Intelligence. Using CNNs and Facebook's DETR, investigated weather phenomena known as ITCZs, documented CNN performance using a database, and developed GitHub repository for project. Employed RNNs and BERT transformers to explore language translation and next word generation in text.
- **Teaching Assistant for TECH 1010 Cohort and AI4ALL**: Served as a Teaching Assistant for the Computer Science Department's TECH 1010, handling tasks such as grading assignments, attendance, and assisting students during classes and office hours. TA'd for the AI4ALL curriculum intro course, with similar responsibilities for students.

PROJECTS

ITCZ Research: Presented research paper at Rutgers Louis-Stokes Association for Minority Participation Conference and Great Minds in STEM Conference

Kaggle Titanic Knowledge Competition: Participated in knowledge based competition on Kaggle and scored above .75 on submissions.

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