Jose M Serra Jr.

 $http://serrajoportfolio.com/ \\ Mobile: +1-973-816-9341$

EDUCATION

• New Jersey Institute of Technology

Master of Science in Data Science

Newark, NJ

Sept. 2023 - May. 2025

Email: joseserra803@gmail.com

• Kean University

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

Union, NJ Jan. 2021 – May. 2022

• Passaic County Community College

Associate of Science in Physical Science; GPA: 3.12

Paterson, NJ

Sept. 2018 - Dec. 2020

EXPERIENCE

• Panasonic Corporation of North America

Newark, NJ

Software Engineering Intern

Nov. 2022 – Present

- **Application Developing**: Developed applications in C# and Python for internal usage by the company, and external usage for customers.
- **Application Testing**: Testing UWP, and .NET Applications developed by Panasonic on Panasonic TOUGHBOOKs.
- BIOS Testing: Testing custom BIOS for specific customers ensuring that the device functions as desired.
- **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. Used the Programming Languages Python, and JavaScript Pandas, libraries included NumPy, and Plotly.js for dyanmic visualizations on web application created with Flask.

• Kean University

Union, NJ

Research and Teaching Assistant

Sept. 2021 - Dec. 2022

- o Convolutional neural networks, Recurrent Neural Networks, and Transformers: Published multiple papers on the topic of CNNs and Transformers. Used Python, SQLite, and specific frameworks included Scikit-Learn, TensorFlow, and PyTorch for developing, documenting and testing results. Researched methods about differences between RNNs and Transformers using mostly TensorFlow and Python for translation and next word generation.
- Teaching Assistant for TECH 1010 Cohort and AI4ALL: Teaching Assistant for Computer Science
 Department TECH 1010. Responsibilities included grading assignments, taking attendance, helping students during
 class and office hour sessions. Teaching Assistant for AI4ALL curriculum intro course for students responsibilities
 were grading assignments, taking attendance, helping students during class and office hour sessions.

PROJECTS

• ITCZ Research: Source code for the paper Validation of AI Models for ITCZ Detection from Climate Data that was published in IEEE journal.

PUBLICATIONS

- J. Serra, R. Quezada, S. Fortes, A. Allaico, N. Tellez, E. Landaverde, Y. Kumar, J. Li, P. Morreale, "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, Y. Kumar, J. Li, and P. Morreale, "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**, Y. Kumar, J. Li, and P. Morreale, "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