Kyle Tranfaglia

Computer Scientist
Data Scientist

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Languages

English — Native/Bilingual

Spanish — Proficient

Awards

Dean's List, *Salisbury University*
Fall 2021 - Fall 2024 (all semesters)

Distinguished Computer Science Student, *Salisbury University*
Spring 2025

Richard A. Henson School of Science and Technology Scholarship,
Salisbury University
Spring 2023 | Renewed Spring 2024

Skills

Programming Languages
C, C++, Python, Java, HTML, CSS, JavaScript, PHP, SQL, R, and BASH

Technical Skills
Windows, Linux, Git, VS Code, Microsoft Office, MySQL, Tableau, Power Bi, React, PySide/PyQt, PyTorch, MPI, OpenMP, Pandas, Scikit-learn

Hard Skills
Software Development, GUI/UI Design, Machine Learning, LLM Development, Database Management, and Data processing, Visualization, and Analysis

Education

Bachelor of Science, Computer Science, *Salisbury University*
2025 | Salisbury, Maryland
Foundations, Algorithms, and Artificial Intelligence Track | Software Engineering Track | Minor in Mathematics
GPA: 3.904

Bachelor of Science, Data Science, *Salisbury University*
2025 | Salisbury, Maryland
Computational Data Science Track

Work and Experience

Intern: FEMA Visualization and Cost Benefit Analysis, *City of Cambridge*
February 2025 – April 2025 | Salisbury, Maryland
I was a paid intern for the City of Cambridge. I developed a Python application that visualizes FEMA-related numerical model predictions using GIS and conducts cost-benefit analyses for various storm surge scenarios, aiding in disaster preparedness for Dorchester County.

Math Emporium Tutor (Math and COSC), *Salisbury University*
September 2022 – May 2025 | Salisbury, Maryland
I hosted an open-door tutoring center that assists all undergraduate students in 100-level and 200-level Math and COSC courses.

Computer Science laboratory Assistant, *Salisbury University*
September 2024 – May 2025 | Salisbury, Maryland
I assisted in Computer Science 117: Programming Fundamentals (Java) and Computer Science 120: Computer Science I (C++).

Projects

Celite
February 2024 – December 2024
I led a team of three undergraduate software engineers, including myself as a full-stack developer, to develop a web application using HTML, CSS, and JavaScript that features a collection of cellular automata simulators. The project utilized an Agile/Scrum development methodology.
- celite.org

Music Painter
January 2023 – February 2024
I developed a downloadable software in Python that reads the data of a WAV file and converts it to a list of dominant frequencies and spectral data, then uses the data to create a 2-D graphical image.
- musicpainter.org

Pynacle Games
September 2024 – May 2025
I programmed and designed a collection of downloadable Python games that integrate AI algorithms to explore solvability and optimality. I created a website with React.js to showcase and download the games.
- Source Code

Chess Openings and Elo: Patterns and Predictions of Game Outcomes
October 2024 – December 2024
I wrote a Python program and a research paper exploring the relationship between chess player Elo ratings, opening choices, and game outcomes, leveraging a dataset of over six million games from Lichess.org.
- Source Code and Research Paper