Kyle Tranfaglia

Computer Scientist Data Scientist



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in kyle-tranfaglia 🜎 ktranfaglia1

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



Programming Languages

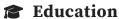
C, C++, Python, Java, HTML, CSS, JavaScript, PHP, SQL, R, and BASH

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



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 🗷