

Gweneth Stewart

+1-610-680-6781 | gwenstew29@outlook.com

 [gwen-stewart-](#) |  [gwenstew](#)

Havertown, PA - 19083

EDUCATION

- **Boston University**

BA Computer Science

◦ GPA: 3.43/4.00

Jan. 2022 - May 2025

Boston, MA

PROJECTS

- **3D Mesh Shaded Rendering**

Tools: [OpenGL, Python]

December 2024

- Implemented 3D rendering pipeline in Python/OpenGL to display primitives including spheres, cubes, cones, and torus shapes.
- Utilized the Phong illumination Model to achieve realistic lighting effects.
- Applied a custom fragment shader with the use of the Phong shading method of per-pixel lighting calculation.

- **Collaborative Filtering for Recommendation Systems**

Tools: [Python, Scikit-Learn, NumPy]

Spring 2024



- Developed and investigated memory and model-based collaborative filtering techniques
- Used Matrix Factorization, SVD, Stochastic Gradient Descent, and Cosine Similarity
- Benchmarked models on the MovieLens dataset, comparing performance with RMSE.

- **College Kithcen: React Web-app**

Tools: [React, HTML/CSS, JS]

Spring 2024



- Built a full-stack web application integrating Spoonacular API, Firebase Realtime Database, and Google OAuth authentication.
- Allows users to discover recipes based on the ingredients in their virtual pantry

SKILLS

- **Programming Languages:** Python, C++, C, Java, JavaScript
- **Web Technologies:** HTML/CSS
- **Database Systems:** MongoDB, SQL
- **Data Science & Machine Learning:** NumPy, Scikit-Learn, Matplotlib, Excel
- **DevOps & Version Control:** Git
- **Specialized Area:** Computer Graphics, Computational Fabrication, Machine Learning
- **Mathematical & Statistical Tools:** Multivariate Calculus, Discrete Math, Algorithms, Probability & Statistics

ACTIVITIES

- **Girls Who Code: Member**

Boston University

Jan. 2023 - May 2025



- Created a welcoming environment for women in computer science.
- Introduced new fields of study within computer science to other members.
- Assisted other members with homework and personal projects.

- **Boston University Review: Graphic Design Team**

Boston University

Jan. 2024 - June 2024



- Designed the art and layout of our Spring'24 issue.
- Allowed students at BU to have published writing and artwork.
- Collaborated with a team of talented students to complete a polished literature and art magazine.