

Mason Gobat

(919) 628-2752 | masongobat@gmail.com | <https://github.com/MasonGobat>

Relevant Skills

Programming Languages: Java, C, JavaScript, HTML, CSS

Technologies: Git, AWS, Unix/Linux

Work Experience

Research Assistant

School for Computing and Information, University of Pittsburgh, Pittsburgh, PA

March 2024 – Current

- Created and trained multiple machine learning models for automated writing evaluation using a corpus of 300+ elementary school essays.
- Enhanced the accuracy and reliability of existing machine learning models.
- Analyzed research data to identify trends contributing to the continuous improvement of evaluation and prediction models.

Lead Programmer

Center for Branding, Katz Graduate School of Business, Pittsburgh, PA

May 2022 – August 2024

- Developed a Python-based pipeline to transform user affiliate marketing data into brand congruence scores, efficiently processing over 22 million rows of data.
 - Utilized the generated brand congruence scores as predictive metrics, identifying and recommending new candidates for brands to target in their affiliation programs, optimizing outreach efforts.
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Education

Bachelor of Science in Computer Science

University of Pittsburgh, Pittsburgh, PA

Expected Graduation December 2024

- **Relevant Courses:** Programming Languages for Web Applications, Algorithms & Data structures, Intro to Cloud Computing
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Projects

[AI Video Generator](#)

- Created a Python script to control a web driver with the selenium library to gather content from Wikipedia and generate an AI assisted summary of that content.
- Parsed text with regular expressions and generated audio with edge-TTS that was combined with a video to mimic YouTube and TikTok shortform content.

[Floor Plan Generator](#)

- Developed a Python program implementing the wave function collapse algorithm to generate digital floor plans for gothic cathedrals.
- Parsed architectural rules from an XML document to inform the algorithm.
- Showcased the floorplans using NumPy graphs through the combination of image tiles.

[Shakespeare's Slights](#)

- Worked with XML based programming languages to extract and analyze insults across Shakespearean plays.
- Transformed results into a [website](#) using XSLT, CSS, and JavaScript.