Brendan Deneen
Massapequa, NY | brendandeneen9@gmail.com

EDUCATION

Binghamton University, State University of New York, Thomas J. Watson College of Engineering and Applied Science

Bachelor of Science in Computer Science **Expected August 2024**

Cumulative GPA: 3.96 /4.00 | NYS STEM Scholarship | **Dean's List:** Fall 2021 – Fall 2023

Relevant Coursework: Programming with Objects & Data Structures, Design & Analysis of Algorithms, Operating Systems, Programming Languages, High-Performance Computing, Database Systems, Intro to Computer Security

TECHNICAL SKILLS

Languages: C++, C, Java, Python, Visual Basic .NET, X-86 Assembly, Scratch, CUDA Toolkit, Processing

Software and OS: Linux Terminal, Vim, Microsoft Visual Studio, Jupyter Notebook, Eclipse IDE, Windows 10, Linux, Windows Subsystem for Linux, Oracle VM VirtualBox, Google Workspace, MS Office Suite

PROFESSIONAL EXPERIENCE

Binghamton University, Computer Science Dept., *Course Assistant* | Binghamton, NY   **August 2023 – December 2023**

- Administered and facilitated an activity section for Architecture from a Programmer's Perspective in collaboration with a Teaching Assistant
- Guided lab activity by answering students' questions; sharpened time-management, science communication, and troubleshooting abilities
- Engineered assignment solutions, fixing errors and helping to implement a reference library for a class of over 80 students

PROJECT EXPERIENCE

Sliding Puzzle, *Game Developer* | Massapequa, NY   **May 2024 – June 2024**

- Developed an interactive sliding puzzle game coded in Java using the Processing sketchbook for a personal project
- Implemented a user interface, user input, detection/reshuffling of impossible starting configurations, high score saving/loading, color schemes, clickable buttons, and error handling in 1,200 lines of code and 50 GitHub commits
- Published four release versions, detailing installation instructions and troubleshooting tips for Windows, Linux and macOS

HackBU Hackathon, *Software Engineer* | Binghamton, NY   **February 2023**

- Competed in the annual HackBU Hackathon, collaborating with another programmer to design a Java program that provides weather forecasts along a driving route
- Executed OpenWeather API calls to make temperature and weather forecasts in three-hour intervals for a list of evenly spaced coordinates along the route, supplied by my teammate's code and Google Maps API
- Won "Best Building a Better Future Hack Sponsored by Raymond Corporation" in competition against 40 other teams

Final Research Paper, *AI Researcher* | Binghamton, NY   **September 2022 – December 2022**

- Conducted research on GPT-3 and MT-NLG, two monolithic natural language processors built on the transformer architecture
- Delineated the technical details of the pretraining and fine-tuning processes while also examining the social implications of implicit bias
- Concluded that, although MT-NLG outperforms GPT-3 on benchmark tests, both language models must be adequately fine-tuned to counteract biased responses

ACM Coding Competition, *Computer Programmer* | Binghamton, NY   **March 2022**

- Collaborated and traded solution ideas with other programmers to solve puzzles, each with a time limit of several minutes
- Applied algorithms knowledge in C and Java to solve HackerRank problems quickly and efficiently
- Ranked in the top 10 and achieved perfect submissions for all attempted challenges, solidifying programming expertise

WORK EXPERIENCE

Stop & Shop, *Frozen Food Clerk* | Amityville, NY   **May 2021 - August 2021**

- Developed valuable cooperative and professional skills while unpacking and relocating frozen food products
- Acquired crucial communication skills and self-reliance by reporting to a supervisor, following safety protocol and managing deadlines
- Directed customers to desired aisles during the remodeling process and answered questions about prices, product locations, and store promotions, honing my efficient communication skills