

Benjamin Truong

(832) - 985 - 5804 | benjamintruong2001@gmail.com | github.com/bngei | <https://bngei.github.io/>
<https://www.linkedin.com/in/benjamin-truong-164861186/>

Education

University of Houston

Jan 2023 - Dec 2023

Bachelors in Computer Science | Math Minor | GPA: 3.75

Work Experience

TRC Companies | Digital Intern

May 2023 - Aug 2023

- Developed **Python** scripts to streamline and automate raw **Excel** data files into deliverable files.
- Utilized **PowerBI** to model raw data from **Excel** files.
- Assisted in data quality assurance processes by identifying anomalies, inconsistencies, and errors in raw **Excel** data, contributing to the maintenance of data integrity and accuracy.

Projects

Medical Clinic Database Web Application

- Launched the development of a comprehensive web-based medical clinic database application, hosted and maintained on **Microsoft Azure**, ensuring secure and reliable access for users.
- Designed and implemented a user-friendly front-end interface, leveraging **JavaScript**, **HTML**, and **CSS** to create an intuitive and visually appealing platform for seamless user interaction and navigation.
- Engineered the back-end functionality using **PHP** and **MySQL**, integrating critical features like appointment scheduling, payment processing, and user data management. Ensured efficient and secure data handling for enhanced user experience.
- Collaborated within a development team to design, develop, and share the project's codebase using **GitHub**, facilitating seamless teamwork, version control, and continuous improvements throughout the project lifecycle.

CT Scan Simulation

- Produced a function CT scan simulation using **Python**, simulating image slicing in horizontal, vertical, and diagonal orientations, coupled with comprehensive image reconstruction on a generated "virtual phantom".
- Proactively collaborated as part of a 4-member team of undergraduates spearheading the implementation and refinement of the system.
- Engineered a novel method for virtual CT scanning, employing an exclusive algebraic approach. This innovation facilitated exact image segmentation, resulting in superior-quality scans, showcasing a strong aptitude for developing advanced imaging techniques.

Coding Simulator

- Created "Coding Simulator," a dynamic clicking game using **HTML**, **CSS**, and **JavaScript**. Demonstrated expertise in front-end development, focusing on user experience optimization and engaging interface design.
- Integrated a public **REST API** to inject humor and jokes into the game, fostering user engagement and adding a unique and lighthearted dimension to the gameplay experience.
- Leveraged **HTML** and **CSS** skills to craft an intuitive and visually appealing game interface. Ensured a user-friendly design that enhanced user interaction and facilitated an immersive gaming experience.
- Utilized **JavaScript** to implement and refine core game mechanics and user interactions. Showcased proficiency in JavaScript programming to create an interactive and engaging gaming environment while optimizing performance.

Video Game Analysis

- Spearheaded a data science project leveraging **R** and **RStudio** tools to analyze a comprehensive video game sales dataset. Utilized KNN and SVM learning techniques to delve into 6,900 cases and 17 unique variables, unraveling insights into successful video game elements.
- Explored the dataset's potential for compelling data visualization, aligning with the team's passion for gaming. Enhanced proficiency in data visualization techniques, translating complex patterns into engaging visuals.
- Anticipated uncovering intriguing patterns and narratives within the dataset to engage gaming enthusiasts and contribute to a broader understanding of successful game dynamics in the dynamic and evolving gaming industry.
- Methodically characterized 17 distinct variables, including game titles, platforms, release years, genres, and intricate genre factors. Merged regional sales data from North America, the European Union, and Japan, along with aggregated critic and user scores, for comprehensive analysis.

Technical Skills

C++ | Python | MySQL | PHP | JavaScript | HTML | CSS | R | RStudio | VSCode | Power BI | Excel | Git