

Stephen Cox

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Education

Bachelor of Science in Computer Science

University of Minnesota

GPA: 3.85

May 2023

Minneapolis, MN

Skills

Languages: C, C++, C#, Java, Python, HTML, JavaScript

Tools and Technology: .NET Core, Linux, Windows, Visual Studio, Unity Game Engine, GitHub, LaTeX, Microsoft Office

Projects

Raytracer

- Developed a backwards-raytracing program using C++ to create images from .obj files containing graphical notation.
- Implemented spheres and triangles by adding ray-intersection functionality and integration of object data, including colors and textures.
- Applied the Phong Illumination model and linear algebra algorithms to achieve lighting, shading, reflection, refraction, and transparency effects.

Othello Artificial Intelligence

- Created a console application to play the Othello board game using C++, featuring an AI opponent utilizing minimax algorithms, state evaluations, and alpha-beta pruning for reduced space complexity.
- Analyzed and reported on the AI's performance across various skill levels, documenting findings using LaTeX.
- Refactored the program into C# and .NET Core, enabling cross-platform compatibility.

Parsons Problems Application

- Collaborated in a team to design an application for creating computer programming exam questions (Parsons Problems).
- Composed the Software Requirements Specification (SRS) and Software Design Document (SDD) documents, outlining system features, use cases, class descriptions with UML, and traceability of requirements.
- Developed a prototype application using C++ and performed unit tests to generate an execution report and an end-to-end scenario document.
- Employed agile methodologies as a scrum master to coordinate and manage the team's development progress.

Professional Experience

Cook

JL Beers

February 2021 – Present

Burnsville, MN

- Served restaurant guests by promptly and accurately preparing orders, minimizing wait times and errors.
- Readied vegetables, meats, and sauces for cooking by using a flat-top grill, fryers, knives, and other kitchen tools.
- Maintained a clean and organized workspace to allow for efficient and safe operations.

Front-end Supervisor, Sales Associate, Receiver

Total Wine & More

February 2016 – July 2020

Burnsville, MN

- Supervised and supported cashiers, assuring timely customer checkouts and efficient retail operations.
- Provided customers with product selections and knowledge through demonstration and education.
- Processed and adjusted invoices for incoming deliveries to ensure accurate product codes, quantities, and prices.
- Managed and organized a backroom storage area for improved space utilization and streamlined operations.