Isaac Stilwell

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EDUCATION

The University of Chicago

Chicago, IL

Bachelor of Science in Computer Science; Bachelor of Arts in Chemistry

Expected, June 2025

GPA: 3.387/4.00

Relevant Courses: Intro to Computer Science I, II; Systems Programming I, II, Algorithms, Scientific Visualization

WORK EXPERIENCE

IbisGen Incorporated

Chicago, IL

Full-stack Developer Intern

September 2023 – Present

- Enhanced LLM assistant's versatility by implementing user-defined parameters for report and chat output settings
- Developed analytics platform, using services, NestJS APIs, and PrismaDB tables to track user activity and costs
- Redesigned LLM chat view interface for more user-friendly design with Tailwind, TypeScript, and Angular
- Revitalized company homepage using Tailwind and Astro for a more polished and professional interface
- Designing further enhancements with Three.js for dynamic background elements
- Created customizable LLM task sequences using RxJS observables, Tailwind, NestJS APIs, and PrismaDB tables

PROJECTS

Personal Website: isaac.info (HTML, CSS, TypeScript, Angular)

December 2023 - Present

- Applied knowledge of Angular to break project into modular components to use lazy loading and less repetition
- Created shell-inspired interface for website navigation using HTML, CSS, and TS
- Developed services for recording per session shell usage history and executing user commands using TS
- Implemented flexbox, grid, and other CSS styles to create aesthetically pleasing and user friendly environment
- Utilized Three.js to animate website background across all pages

Moodboard Generator (HTML, CSS, JavaScript, Python)

August 2023 – Present (Currently Paused)

- Used Python to sort and analyze user uploaded images to find most common colors and their average RGB values
- Developing HTML/CSS templates for different moodboards with interchangeable accent colors
- Developing implementation of analysis results for selection of accent colors for web-based moodboard
- Developing Selenium-based image scraper to add images from keywords to automate the image finding process

Checkers Game (Python)

February – March 2023

- Worked in team environment to develop working checkers game with two-player and automated opponent modes
- Used knowledge of classes and numpy to create generic board compatible with checkers, chess, and other games
- Created checkers-specific game logic based on game rules and implemented for use with generic board

1D, 2D, and 3D Renderers (C)

January – March 2024

- Used convolution and linear interpolation to convert data from world to index space and plot on 1D graphs
- Applied convolution, bilinear interpolation, color mapping, and marching squares to generate 2D maps
- Utilized convolution, Blinn-Phong lighting, opacity operations, and ray casting to create 3D volume renders

SKILLS

Languages and Frameworks: Python; HTML; CSS; JavaScript; TypeScript; C; Java; Angular; Tailwind; RxJS; NestJS; PrismaDB; Node.js; Three.js

Experience With: Autodesk Inventor; Photoshop; Git; GitHub; GitLab; Subversion; Jira