IAN DOUGHERTY

COLLEGE STUDENT

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EXECUTIVE SUMMARY

20-year-old computer science major with a background in web development. Moving forward with a focus on algorithm design and application.

EDUCATION

Illinois Institute of Technology (3.9 GPA)

Expected completion of bachelors program in 05/23: B.S. Computer Science

SKILLS & TECHNOLOGIES

- C#
- Java
- Python
- JavaScript
- HTML/CSS
- MERN Stack
- Ruby on Rails
- SQL
- Git

STRENGTHS

- Motivated to learn
- Detail oriented
- Strong communicator
- Creative problem solving
- Object oriented design

WORK EXPERIENCE

Full Stack Web Developer

Receptify | Spring of 2022

- Using the MERN stack to create a platform to connect students to Title IX offices and confidential advisors
- · Responsible for building basic chat and CMS functionality
- Handling early DevOps and creating internal REST APIs

OAF Micro-Internship

Open Avenues Foundation | Winter of 2021

- Designed & developed a full-stack personal expense tracker
- Integrated a Ruby front-end and a Rails back-end

Programming Instructor

iD Tech Camps | Summer of 2021

- Taught fundamentals of JavaScript to grade school students
- Lectured for two hour long sessions five days a week
- Designed supplementary material to assist curriculum

PROJECTS (SEE WEBSITE)

2D Rigid Body Physics Engine

JavaScript & HTML5 Canvas

- Uses a multitude of algorithms to run efficiently in browser
- Iterative impulse resolution to support stable simulations
- Packaged into a framework to easily deploy in other projects

Raytracing Engine

C# & .NET Framework

- Supports sphere rendering, multiple materials, and lighting
- Multithreaded to optimize rendering time

Realtime Multiplayer Game Framework

JavaScript using WebSockets in Node.js

- Implemented server-side architecture from the ground up
- Supports client-side prediction and server reconciliation
- · Serializes data to optimize ping times