

IAN DOUGHERTY

COMPUTER SCIENCE STUDENT

Email: ianedougherty01@gmail.com
Phone: 312-659-9027
Website: idougherty.net

EXECUTIVE SUMMARY

20-year-old computer science major with a background in web development. Moving forward with a focus on distributed computing and intelligent systems.

EDUCATION

Illinois Institute of Technology (3.9 GPA)

Expected completion of coterminal program in 5/24:
M.S. Computer Science
B.S. Computer Science

SKILLS

- C#
- C
- Python
- JavaScript | HTML | CSS
- React.js
- SQL
- Java
- Spring Boot
- Jenkins
- Docker | Kubernetes
- Git

STRENGTHS

- Independent learning
- Technical communication
- Creative problem solving
- Object oriented design

WORK EXPERIENCE

Software Engineering Intern

CME Group | May 2022 - November 2022

- Built POC pilot projects to aid in GCP migration on a fast paced team
- Developed multiple flexible APIs to serve application health data
- Team placed 2nd in CodeUp, an algorithmic trading hackathon

Full Stack Web Developer

Receptify | January 2022 - August 2022

- Developed a platform to connect students to Title IX offices and confidential advisors
- Implemented basic chat and CMS functionality using MERN stack
- Handled early DevOps and created internal REST APIs

OAF Micro-Internship

Open Avenues Foundation | Winter of 2021

- Developed a full-stack personal expense tracker using Ruby on Rails
- Included report generation, user accounts, and transaction querying

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

PROJECTS (SEE WEBSITE)

2D Rigid Body Physics Engine

JavaScript & HTML5 Canvas

- Optimized using industry 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 diffuse, reflective, and emissive materials
- Simulates camera aperture to produce depth of field effects
- Multithreaded to optimize rendering time

Realtime Multiplayer Game Framework

JavaScript using WebSockets in Node.js

- Supports client-side prediction and server reconciliation
- Serializes packet data to optimize ping times