

Ding Wen (Kenny) Han

EDUCATION

Bachelors of Science in Mathematics and Computer Science

University Of Pittsburgh

GPA: 3.9

Every Semester Dean's List

2021 – 2024

Pittsburgh

PROJECTS

Ordinary Differential DFEILD Solution Grapher (1st Place)

2022

SteelHacks Hackthon 2022 Winner

Created a website for solution graphing ODEs with an improved Euler's Method, 4/5th Order Dormand-Prince, of numerical approximations.

- Created a front end proof of concept that has user enter in differential equation and initial value and graphs the solution using JS for computations

Fish Aquarium

2021

- Application coded in C#, I created fish object classes that have hunger, size, destination, current location, etc.
- Right clicks spawn randomized fish (appearance, size, speed, etc) with each tick calculating optimal trigonometric path for smooth swimming
- Fish seek food if hungry, food can be dropped from top of tank with a button
- If hunger is zero, fish floats to top of water and the instance of fish is deleted

ASCII Towers of Hanoi

2020

- Towers of Hanoi game created in C#: I created a peg class that stores ring according to game rules
- Lets user move rings with ASCII art from the three pegs
- Solution, ideal moves, and minimum number of moves show at the end of the game

RELEVANT CLASSES

Mathematics: Linear algebra, Theoretical Mathematics (Real Analysis), Analytic Geometry and Calculus 3, Ordinary Differential Equations

Computer Science: Algorithms and Data Structures I and II, Practical AI, Theoretical CS, Discrete Mathematics, Systems Software, Assembly Language

LANGUAGES

Java, Python, C#, C/C++, Assembly : RISC-V/MIPS and x86, HTML, CSS, JS

EXPERIENCE

Data Structures and Algorithms (CS 445) TA

University of Pittsburgh

Teach recitations and hold office hours for teaching data structures and algorithms from linked lists, tree maps and to hash maps with a focus on time and space complexity.

Mathematics Tutor

University of Pittsburgh

2021 –

Present

- Tutors students any math class listed above by appointment
- I approach teaching with a combination of understanding math definitions, promoting natural intuition, and forming allegories to familiar math concepts which leads students to fully understand new ideas and the process of problem solving

Chess Teacher and Chinese Language Teacher Assistant

2016 – 2019

Newtown-Yardley Chinese School

- Worked with Chinese teachers to help kids, assign homework and grade quizzes
- Ran an after-school chess class, teaching, organizing and helping student with chess