Luke Jachimiec
Computer Science and Mathematics Undergrad

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EXPERIENCE

MONMOUTH COLLEGE SOFIA MENTOR/STUDENT   **Monmouth, IL**

Student   **FALL 2022 and Fall 2023**

- Worked in a small group to research and learn basic computer elements
- Built an 8-bit computer with very basic functionality using breadboards and small computer chips
- Gained experience with fundamental computer components

Mentor

- Led a small group through a research project, with the guidance of my professor
- Researched and built Ben Eater's 6502 Computer
- Programmed a simple Pong game on the computer
- Learned basic memory allocation, assembly programming, and the core elements of how a machine reads code and data to produce an output

MCDONALDS   **Naperville, IL**

Crew Member   **APR 2022 - Aug 2024**

- Maintained high standards of customer service during high-volume work shifts and fast-paced operations.
- Resolved customer complaints in a professional manner.
- Upheld high standards of productivity and quality in operations.
- Drove team success by quickly completing assigned tasks.
- Fostered strong teamwork to enhance operational efficiency.

EDUCATION

MONMOUTH COLLEGE   **Monmouth, IL**

BA in Computer Science   *2022-2026*

BA IN MATHEMATICS

PROJECTS

- **CONWAY'S GAME OF LIFE** - WITH A SMALL GROUP WE RECREATED CONWAY'S GAME OF LIFE ON A WEBPAGE, USING HTML, CSS AND JAVASCRIPT TO LEARN WEB BASED APPLICATION PROGRAMMING. THE PROJECT CAN BE FOUND ON MY GITHUB PAGE, OR THE WEBPAGE LINK HERE [LUKEJAC13.GITHUB.IO/GAMEOFLIFE/](https://lukejac13.github.io/GameOfLife/)
- **SUDOKU SOLVER** - BACK IN 2018, WHEN I WAS LEARNING C++ FOR THE FIRST TIME, I MADE A SIMPLE COMMAND LINE SUDOKU SOLVER, WHERE YOU COULD INPUT YOUR UNSOLVED SUDOKU BOARD, AND IF A SOLUTION EXISTED, WOULD AUTOMATICALLY FILL OUT THE REST OF YOUR BOARD WITH THE SOLUTION. THEN, IN 2024, AFTER MY GAME OF LIFE PROJECT, I CREATED THE SAME SUDOKU SOLVER APPLICATION AS A WEB PAGE, SHIFTING FROM C++ TO JAVASCRIPT IMPLEMENTATION. THIS PROJECT CAN BE FOUND ON MY GITHUB PAGE, OR AT [LUKEJAC13.GITHUB.IO/SUDOKUSOLVER/](https://lukejac13.github.io/SudokuSolver/)

COURSEWORK
All my completed classes as well as the skills learned within each course

Computer Science

- **COMP-151: Intro to Programming** (Fall 2022)
  - Python fundamentals, variables, functions, object types, problem-solving skills
- **COMP-152: Data Structures and Algorithms** (Spring 2023)
  - Data structures (stack, queue, tree, linked lists), Algorithms (Search and Sorting), Objects, Time Complexity
- **COMP-235: Intro to Systems Programming** (Fall 2023)
  - Low level programming languages (C and assembly), binary/hexadecimal data, memory management, code optimization
- **Comp-240: Computer Applications** (Spring 2024)
  - Git/Github, software development, version control, team collaboration, project management, project based programming and software development within a small team
- **COMP-337: Computer Communications** (Spring 2024)
  - Computer networking fundamentals, network protocols (TCP/IP, HTTP, UDP, FTP), protocol analysis and design, network architectures, performance evaluation,
- **COMP-310: Database Theory and Design** (Fall 2024)
  - Database fundamentals, data modeling, relational databases, SQL, MySQL, Pandas, database design

Mathematics Classes

- **MATH-151: Calculus 1**(Spring 2023)
- **MATH-152: Calculus 2** (Fall 2023)
- **MATH-260: Discrete Mathematics** (Fall 2023)
- **MATH-241: Linear Algebra** (Spring 2024)
- **MATH-317: Geometry** (Fall 2024)

ADDITIONAL INFORMATION

- Dean's List - Fall 2022, Spring 2023, Spring 2024
- Computer Science Award: Introductory Sequence 2022 Recipient
- Research: Monmouth College SOFIA Project Student - Fall 2022
- Research: Monmouth College SOFIA Project Mentor - Fall 2023
- Member of Phi Delta Theta - Current Treasurer
- Member of Monmouth College Track and Field Team, 2022 - 2026
- Monmouth College Dean's Scholarship Recipient