

Lucian Terhorst

(347) 260-0921 | LTerhorst@clarku.edu | github.com/Lecharnt | linkedin.com/LucianTerhorst

EDUCATION

Clark University

Bachelor of Arts in Computer Science; GPA: 3.66

Worcester, MA

Expected May 2027

- Relevant Coursework: Data Structures, Discrete Structures, Automata Theory, Algorithms

EXPERIENCE

Software Developer Intern

Sep. 2024 – May 2025

CIE Education Company

New York, NY

- Collaborated with a Senior Developer to integrate Google Sheets with app data, boosting content implementation efficiency by 12%.
- Designed modular UI, and responsive mobile components following best UX/UI practices.
- Worked cross-functionally with global educators, contributing to a 10% increase in student retention.

Undergraduate Research Assistant

Jun. 2025 – Present

Clark University

Worcester, MA

- Developed an AI-powered economic simulation to analyze agent behavior in a marketplace using Deepseek AI.
- Prepared research accepted to the International Conference on E-Business Engineering (ICEBE).
- Secured APIs and managed GitHub, enhancing data security.
- Visualized large datasets in a simulated village environment to study real-time AI decision-making.

Software Developer

Jan. 2024 – May 2025

SlimeWare

Worcester, MA

- Developed software in the Unreal engine using polymorphism, implementing quests, traps, and movement.
- Game was accepted to Pax East two times, and was accepted by Red Rabbit Games for funding.
- Managed and organized project using plastic and Trello, increasing efficiency by 14%.

PROJECTS

AI Photo-to-Flashcards App | *Python*

Jun. 2025 – Aug. 2025

- Built an AI-driven app that converts lecture images into study flashcards, leveraging OCR and NLP.
- Improved users' study efficiency by 15% and academic performance by 10%.
- Optimized API communication through caching, reducing latency by 30%.

Directed Study: Card Game Engine | *C++, Ongoing*

Sep. 2025 – Present

- Designing and coding a modular engine to simulate card game mechanics.
- Exploring algorithmic optimizations for turn-based systems, such as a finite state machine for caching and loading scenes, or trees to store similar constructs and quick searching using a binary search tree
- Working under a senior Developer with 30+ years in experience in a mentoring-like process

AI Pathing in Java Environment | *Java*

Jan. 2024 – Mar. 2025

- Designed AI pathfinding for NPCs in a Java-based simulation environment.
- Integrated pathing with environment with self-made 2d engine.
- Improved efficiency by 20% using goal-oriented pathing.

Card Search Algorithm | *Python, Streamlit, html*

Sep. 2025 – Nov. 2025

- Implemented a search algorithm that ranks results by word occurrence in scenarios, allowing users to understand the relation of their search result to their topic rather than finding a specific piece of info.
- Developed and performed software testing using Streamlit for the interface and Scryfall api for card information

Energy Efficiency Website | *html, CSS, Node.js, SQL*

Oct. 2025 - Present

- Engaged in web development that updates with relevant information from an SQL database.
- Collaborated with a Scientist of 20+ years, helping organize and sort data from wind turbines and solar panels
- Conducted rigorous testing of website security using Column-Level Encryption

TECHNICAL SKILLS

Languages: Java, Python, C++, C#, HTML, CSS, JavaScript, SQL

Frameworks: React.js, Node.js, Express.js, Streamlit, Bootstrap

Tools: Git, MongoDB, MySQL, VS Code, Linux, Figma