

Luciano Paredes

EDUCATION

University of Central Florida, Orlando, FL

Bachelor of Computer Science

RELEVANT COURSEWORK

Programming with C, Discrete Structures, Data Structures and Algorithms

SKILLS & CERTIFICATIONS

Programming Languages: C, C++, Rust, Typescript, HTML, CSS **Frameworks:** React, Next JS

Technologies: Git, Oracle Virtual Machine

CompTIA Certification: CompTIA ITF+

Microsoft Certification: Network Fundamentals, Cloud Fundamentals, Mobility and Device Fundamentals, Security fundamentals, Software Development Fundamentals

PROJECT EXPERIENCE

Bloomberg Tech Lab on Campus – University of Central Florida, Orlando

- One of 40 students selected to collaborate with Bloomberg engineers in a small group setting to build an application using RabbitMQ and Docker.
- Utilized Python to design and implement a robust message queue system using RabbitMQ, enhancing real-time data processing and communication between producer and consumer components.
- Developed a deeper understand of core Python/CS concepts (Classes, Inheritance, OOP), as well as financial domain knowledge (Tickers, Industry Sectors).

Torrent Client – Solo developer

- Implemented a torrent client using Rust, TCP sockets, and an async architecture to make data transfer between more than 100 of peers simultaneously possible.
- Implemented system abstractions using Rust's standard library to enable cross-platform interoperability (Windows, Linux, macOS) for client and server communications.
- Created a parser and decoder, successfully decoding bencoded data, a type of data that uses binary encoding to store and transmit data, to interpret torrent files and peer messages.

Chat Web App – Lead developer in team of 4

- Built a highly responsive web chat application using Next.js and Tailwind CSS to create a modern, scalable user interface that provides a seamless real-time messaging experience.
- Designed and implemented a PostgreSQL database to efficiently store chat messages and user data, resulting in enhanced data scalability and reliable data management.
- Integrated secure user authentication using NextAuth with multiple OAuth providers, ensuring a seamless and secure login experience for users across different platforms.

Terminal Based Chat App – Solo developer

- Designed and implemented a minimalist chat application using the Rust programming language and TCP sockets, achieving successful real-time communication between a server and multiple clients.
- Optimized server-client communication by implementing multithreading, increasing performance by 5x.

Video to ASCII App – Solo Developer

- Developed an application that converts video files into their ascii representation by measuring the brightness of clusters of pixels and map them to their respective representations in ASCII characters, resulting in a final video composed of only ASCII characters that plays as if it were the original.
- Leveraged advanced image processing techniques to ensure accurate visual representation and smooth playback that mimics the original video.