Luke Cullen

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EDUCATION

University of Central Florida

Orlando, FL

Bachelor of Science in Computer Science - 3.78 GPA

August 2023 - May 2027

EXPERIENCE

Lead Developer

May 2025 – Present

DenTraceX

Orlando, FL

- Non-profit organization dedicated to collecting dental records of missing persons, in order to cross-reference them with unidentified remains
- Authoring a secure database from the ground up to make submitting and accessing data for medical examiners as accessible as possible
- Working with a team of diverse disciplines to process and handle sensitive medical information

Cashier February 2023 – Present

Publix Super Markets

Orlando, FL

- Processing customer transactions efficiently while providing great service
- Able to adapt easily to changes in working condition/customer inflow
- Working as a team to ensure the completion of all daily tasks while keeping store operations running smoothly

PROJECTS

<u>Voiceboard</u> | React, TypeScript, Gemini API, Mermaid

September 2024 - September 2024

- Created for ShellHacks 2024, won 1st place for Google's sponsor challenge
- Aims to make whiteboarding accessible to all using voice control and Google's Gemini AI
- Utilizes Chrome's speech recognition to recieve prompts from users
- Implements prompt engineering through the Gemini API to create Mermaid syntax
- Utilizes context awareness to allow users to iterate on diagrams

<u>Lootcode</u> | React, Clerk, TypeScript, MySQL, Zx Shell, Docker, tRPC

February 2024 – May 2024

- Created for KnightHacks Project Launch 2024, won 1st place
- Developed a gamified application to study Data Structures and Algorithms
- Uses Docker images and the Zx Shell package to self-host code grading instances, maintaining security of the server
- Implements a MySQL database to track user statistics, progress, and game inventory
- 7000+ unique visits, featured in Linux Magazine's OSS section

DenTraceX Monorepo | React, ExpressJS, TypeScript, MySQL, Docker, Coolify

May 2025 – Present

- Database and client page for the DenTraceX NGO
- Created authentication and database submission systems aimed to be as accessible as possible
- Actively designing administration infrastructure to allow volunteers to moderate the database without compromising data integrity

TECHNICAL SKILLS

Languages: Java, Python, C/C++/C#, MySQL, JavaScript, TypeScript, HTML/CSS

Libraries/Frameworks: React, ExpressJS, Next, Prisma, Clerk, tRPC, libGDX, Unity, Node.js, Tailwind

CSS, Websockets, OpenCV, MediaPipe, pandas

Developer Tools: Linux, Coolify, Git, Docker, VS Code, Eclipse