

Lance McMahon

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PUBLICATIONS

A Novel Prediction Method for Glaucoma Detection Using Retinographies

Fall 2023

Conference Paper

<https://ieeexplore.ieee.org/document/10436242>

- Researched and developed an automated glaucoma detection system with machine learning
- Presented to research scientists at the IEEE C3 Conference virtually

EXPERIENCE

Texas Tech University SmartBioMed Laboratory | Python, Jupyter, Bash

Summer 2023

Undergraduate Research Assistant

[TTU SmartBioMed Lab](#)

- Collaborated on the proof of concept for a novel automated glaucoma detection system observing acceptable validation accuracies from 83.33% to 100% with different classifiers

RocketScribe | React, React Native, TypeScript, Firebase, Objective-C, C++, C

Summer 2023

Application Developer

[RocketScribe](#)

- Developed and maintained the software for a mobile app providing free AI audio transcriptions
- Integrated a C++ port of OpenAI's latest Automatic Speech Recognition (ASR) system on Apple hardware's Neural Engine
- Gained 466 downloads and maintained 5 stars on the App Store

Florida State University Department of Computer Science | C++

Fall 2023

Grading Assistant

[FSU Computer Science](#)

- Graded C++ programs in COP3330 Object-Oriented Programming

MonkeyChat | React Native, JavaScript, Node.js

Summer 2021

Application Developer

- Developed a mobile chat application and published it to the App Store where it had 119 downloads

EXTRACURRICULARS

FSU ACM Programming Contests

Fall 2022 - Summer 2024

Competitive Programming

Tallahassee, FL

- Placed 6th and 9th in upper-division competitive programming contests at Florida State University using C++

EDUCATION

Florida State University

August 2024

B.S. Computer Science, Minor in Physics

Tallahassee, FL

- **GPA:** 3.713
- **Awards:** President's List (x3), Dean's List (x3)
- **Relevant Coursework:** Data Structures and Algorithms, Operating Systems, Full Stack App Dev with C#, Intro to AI, Software Engineering I-II, Ethics & Computer Science, Intermediate Modern Physics, Chinese I-III

TECHNICAL SKILLS

- **Languages:** TypeScript, JavaScript, HTML, CSS, Python, C++, C, Objective-C, LISP
- **Databases:** MongoDB, Firebase, SQL
- **Tools/Frameworks:** Unix, React, React Native, Git, GitHub, Jupyter Notebooks, Expo