JACOB LEONE

ARTIFICIAL INTELLIGENCE SPECIALIST

★ Lake Worth, FL 33437★ jacob0leone@gmail.com

561.789.3725

www.linkedin.com/in/Jacob-leone
https://github.com/jacklion710

Education

Master of Science in Artificial Intelligence

Florida Atlantic University, Boca Raton, FL. Graduation date: December 2023

Bachelor of Arts in Psychology

Florida Atlantic University, Boca Raton, FL. Graduation date: May 2022

Technical Skills

Programming Languages: C/C++, GLSL, HTML, Python, JavaScript, typescript

Tools & Technologies: Colab, Microsoft Office Suite (Word, Excel, PowerPoint), Max MSP, IDEs, Soldering, DSP, Raspberry Pi, DAWs Operating Systems: Linux Ubuntu, Windows10, MacOS

Professional Experience

Graduate Research Trainee, National Science Foundation at FAU | Boca Raton, FL

August 2022 – Present Day

Cumulative GPA: 3.9

Engaged in research, design and development for detection of ocular disease using CNNs and retinal photography.

- Developed, and tested software for detecting ocular diseases with deep learning and medical images using Tensorflow.
- Collaborated with professors and other graduate students on performing research and designing experiments.
- Implemented a framework for a web based audio-visual solution.

Production & Development (Internship), Vector Climate | Pompano, FL

May 2022 – August 2022

Worked with Vector Climate Labs to produce and develop the companies advanced mobile cooling systems.

- Production and fabrication of the company's flagship products, the Vector and Spartan for industrial outdoor climate control.
- Collaborated with cross-functional teams for timely production and assembled PCB prototypes.

PCB Design & Assembly, Steven Leone; PE LLC | Lake Worth, FL

September 2020 - Present Day

Responsible for PCB assembly duties involving prototyping, unit test and functional test assigned by Project Manager.

- Practiced standardized procedures for following schematics, spec and BOM sheets, which leads to efficient production of clients designs for timely product releases.
- Engaged in onsite coordination, progress, planning, closeout, & quality control to add support to project development.
- Soldering SMT and Thru Hole components on: PCBs, IC's, microcontrollers, power electronics, FETs, diodes and resistors.
 Sizes included 0402, 0603, 0805 SMT resistors, capacitors, diodes, ESD components.

Consumer Electronics Repair, uBreakiFix | Royal Palm, FL

October 2021 - May 2022

Responsible for processing customers electronics and diagnosing issues related to the device. Worked with co-workers to accommodate customers with fast turnarounds for electronic repairs.

Diagnosed device issues, managed inventory, and repaired a range of electronic devices.

Relevant Projects

Object Detection System on Social Media | Deep Learning

December 2022

The goal of this project was to implement Convolutional Neural Network for detection of opiate related activity on Instagram.

- Designed a Convolutional Neural Network (CNN) leveraging computer vision techniques. Used web scraping post-training to analyze a vast number of images across the platform.
- Worked closely with professors and colleagues to research, design, and systematize the detection mechanism.
- The research findings are pending publication, aiming to provide insights into online drug-related activities, This potentially aids law enforcement agencies.

Web Based Audio-visual Platform | Web Audio & Graphics

August 2022

- Designed, built and tested CRUD web platform for my immersive art based side project. Including frameworks like Next.js, React, Chakra UI, Firebase, P5.js, RNBO.js and web audio. Repo: https://github.com/jacklion710/jacklions-website
 Site: https://jacklion.xyz
- Integration between RNBO.js, web audio and p5.js for an interactive web based experience involving interactive audio and visual elements on a web browser.
- Created an innovative & responsive UI using typescript for user friendly web based audio-visual experiences.

MIDI Delay Plugin Development | Audio Development

July 2021

Developed a unique algorithm for delaying signals in real-time using circular buffers as a function of a tuned MIDI note input in Max MSP.

- Built a plugin for use in electronic music production.
- Implementation of user feedback before a product release.
- Published devices online on gumroad: https://jacklion.gumroad.com/l/tunedelay?layout=profile

Relevant Coursework

Python
Natural Language Processing
Artificial Intelligence
C Programming
Computational Foundations of Al

Data Structures
Advanced Internet Systems
Software Engineering
Cognition
Analysis of Algorithms

Deep Learning Data Science AI in Medicine & Healthcare Typescript