# Colin T. Le



Email: colintranle@knights.ucf.edu | Website: www.colinle.com | GitHub: https://github.com/colintle

**Permanent Address:** 7114 118<sup>th</sup> Terrace N, Largo, FL 33773 (727 – 455 – 8802)

#### **EDUCATION**

University of Central Florida, Orlando FL • Burnett Honors Scholar

GPA: 3.95 / 4.00

Major: Computer Science and Mathematics with Bachelor's Honors

Graduation Date: May 2025

#### INTERNSHIPS

## Mirizan (Jan. 2022 – May 2022) • Full-Stack Software Engineer Intern

- Email Automations Project
  - Developed a backend (Node & Express) script to scan the company's MySQL database for active venues, join their schedules
    as well as their active employee assigned specific dates for the current month, and pass through an asynchronous process that
    formats an email listing the dates for their specific venue and submits it once.
- Mirizan App
  - o Developed views (Vegan & Non-Vegan Menus, Login, and Products) within the *Mirizan* App, which is available in the App Store and Google Play Store, using **JavaScript** and frameworks like **React Native**.

# Lockheed Martin (Aug. 2022 - Jan. 2023) • System Engineering Intern • Secret Security Clearance

- Data Management GUI
  - O Developed a **MATLAB** script that allows for the IRST Algo Team to generate a GUI (Graphical User Interface) to track the growth of the database through all users and programs
  - Reduced the space of the database by 20% during my duration at IRST Algo Team
- Replays Generator
  - o Developed a MATLAB script to generate flight replays based on the variations of IRST (F16, F18, Legion Pod, etc.)

#### J.P. Morgan Chase & Co. • Software Engineering Intern

## **PROJECTS**

#### SwampHacks 2023 • Full-Stack Software Engineer

- Adventure Roulette
  - Developed a MERN (MongoDB, Express, React, and Node) web app that takes in the user's locations and generates different locations that are nearby to explore the unknown.
  - o The web app also utilizes **Google Maps Platform** to generate different genres of locations (parks, stores, restaurants, etc.) in the backend and **RTK Query** to communicate between the client and server and store the locations in cache.

## J.P. Morgan Chase & Co. Code for Good Hackathon • Full-Stack Software Engineer

- Pathway Tool
  - Developed a web app for Tarrant To & Through Partnership (T3) to provide the ultimate experience for the student and family to be more educated about the possibility of pursuing higher-level education using the MERN Stack (MongoDB, Express, React, and Node) and openAI API
    - A student and family may fill out a survey to display personalized information of schools and scholarships or chat with T3acherBot, our chatting bot, to answer any questions/concerns.

# Wearable Engineering and Assistive Robotics (WEAR) Lab • Lab Researcher

- Pre Impact Fall Detection and Prevention using Wearable Functional Electrical Stimulation (FallFES)
  - Developing a **Python** threshold/machine learning-based pre-impact fall detection algorithm to detect a fall at its descending phase.
  - Developing a closed-loop FES control algorithm using **Pandas** and **Numpy** for arresting a fall in real-time after pre-impact fall detection.
- Intelligent, Interactive and Intuitive Autonomous Robotic Cart (I<sup>3</sup>ARC)
  - Developing an autonomous cart using a Robot Operating System (**ROS**) platform for navigation, collision avoidance and person following features.
  - Developing a mobile app to help customers interact with the autonomous cart using React Native

## Personal Portfolio • https://github.com/colintle

• More personal Full-Stack projects can be found on my GitHub page!

## RELEVANT SKILLS

**Programming Languages** 

**Technologies** 

C/C++, CSS, HTML Java, JavaScript, MATLAB, Python, VBA Arduino, AWS, Express, Git, Gitlab, Jira, Jupyter Notebook, Linux, MongoDB, mySQL, Node, React/React Native, ROS, Ubuntu