# Liam Dumbell

github.com/Liabell

### **EDUCATION**

## Florida Institute of Technology

December 2024

Bachelor of Science, Computer Science w/ Cyber Security Concentration

Melbourne, FL

- GPA 3.68
- Dean's List Spring 2021, Fall 2022, Spring 2023, Fall 2023, Spring 2024
- Member and Mentor for the Florida Tech Cyber Security Club, <u>FITSEC</u>
- Cyber Operations Concentration
  - Intro to Cyber Ops: Experience solving Binary Exploitation, Reverse Engineering, Cryptography challenges using various tools in Linux.
  - Reverse Engineering: Experience doing binary analysis and exploitation using Binary Ninja, GDB, pwntools and Python scripting. Worked on Auto-Exploitation Tool.
  - o Vulnerability Research: Experience learning and solving challenges based on Binary Exploitation techniques.
  - o Space Heroes: Experience creating challenges for and running the Florida Tech 2024 Space Heroes CTF.
  - Cyber Forensics: Experience learning about Data Acquisition, Digital Forensics tools, Virtual Machines, Network, Mobile Devices, Drone and Cloud Forensics.
- National Cyber League Competition
  - o The NCL competition provides students with experience in solving real-world cybersecurity challenges such as Binary Exploitation, Web Application Exploitation, Password Cracking, Cryptography, Forensics and Network Traffic Analysis
  - o 24th/3593rd place in 2023 Spring NCL team game on FITSEC Team B.
  - o 39th / 4672<sup>nd</sup> place in 2023 Fall NCL team game on FITSEC Team B.
  - 106th / 4199th place in 2024 Spring NCL team game on FITSEC Team B.
- Computer Science Senior Year Project
  - Created a Bot Detection Framework for Reddit named Policing Bots that scans Reddit and detects bot accounts based on account data, behaviour and post content. <u>balkirprpl.github.io</u>

### **WORK EXPERIENCE**

## **Trinidad Systems Limited**

July 2024 - August 2024

Software Engineering Intern

Port of Spain, Trinidad and Tobago

- Contributed to an embedded systems project by parsing ISO 8583 data from POS terminals, developed a C library to store relevant data, created VS Code Dev Containers and C Makefiles to assist development, while testing with sample data from TSL.
- Created JavaScript Frida scripts for an Android reverse engineering project to modify app behavior, including SSL unpinning and user login bypass, using Objection for runtime exploration. Also Created Patched APKs with these modifications through editing SMALI.

## Self-Employed

January 2018 – January 2020

Computer Designer and Builder

Port of Spain, Trinidad and Tobago

- Designing and Building of Custom computer systems for clients based on their needs and price ranges.
- Upgrading pre-existing computer systems based on client needs and price ranges.
- Designing and Building of Virtual Reality Computer Systems to achieve optimal performance and immersion.
- Device Repair and Cleaning to decrease the risk of hardware failure and improve performance of systems.
- Set up SoHos (Self Office, Home office), including wired/wireless networking.
- Cost negotiations and budgeting.
- Used in-depth and self-taught knowledge of information systems and hardware.

#### **SKILLS**

- Software Development and Programming Python, Java, JavaScript, C, C++, HTML, Node.js, React, x86 Assembly, SQL, NoSQL, Database Systems (MySQL, MongoDB), Data Structures and Algorithms, Amazon Web Services, Docker Desktop, GitHub.
- Knowledge of Cybersecurity techniques, including Reverse Engineering, Cryptography, Binary Exploitation, Disassemblers,
  Decompilers, Digital Forensics, Log Analysis, Network Traffic Analysis, Web App Exploits and Password Cracking.
- Proficient in the Windows and Linux operating systems.
- Extensive knowledge of Microsoft applications (Word, Excel, PowerPoint).
- Wide knowledge of computer hardware (building systems from the ground up, replacing parts, diagnosing problems).
- Able to work well alone or in groups.
- Cybersecurity focused education.