Amar Lakshya

A cyber security postgraduate with extensive professional experience in C++ and distributed systems.

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https://github.com/amar-laksh

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https://amar-laksh.github.io/

Skills:

Languages: C, C++, C#, Rust, Python, Java, JavaScript

Operating Systems: Linux, Windows, Mac

Frameworks: Apache, Docker, AWS, React, Qt, ROS, RabbitMQ

Databases: PostgresSQL SQL, GraphSQL, Redis

Work experience

Sky Drones

Contract- Software Engineer   **Sep 2020 — Present**

- Designing and developing the drone controller software using C++17, python, Qt5 and handling deployment using Github Actions, AWS

Nymble Labs

Full-time Systems Engineer   **Sep 2018 — Feb 2019**

- Implemented the next iteration of the product using *C++ 14, ROS2* and *Qt5*.

- Revamped the entire software architecture to produce secure, clean *OOP* code.

Intern – Software Engineer   **Dec 2017 — Jul 2018**

- Designed a *ROS2* based distributed software architecture of the system.
- Wrote a *Qt5* based display application for the on-board display.

Education

M.Sc. Cyber Security   **Sep 2019 - Sep 2020**

University of Birmingham   *Distinction*

- Cryptography
- Intelligent Data Analysis (Extended)
- Designing secure systems
- Hardware and Embedded Systems Security
- Forensics and Malware Analysis
- Network security (Extended)
- Penetration Testing
- Research project

B.Sc. Information Technology   **Jul 2014 - Apr 2017**

St. Xaviers' College   *2:1*

- C, C#, C++, Java, Data Structures, Software Engineering, Operating Systems, Data Mining.

Publications & Certifications

- **CompTIA Sec+ Certificate**
- **Crossed & Knotted, Composite Novel**

Projects & Contributions

Hack-A-Mole   **Sep 2020**

- An analysis and extension of hacking games that are used to teach penetration testing to students.

Logi's Circle of Security   **Apr 2020**

- A penetration test conducted on Logitech's Circle camera.

- The test showed that the *Logi Circle* is well-secured.

FOS   **Oct 2019**

- A Monolithic UNIX-like Kernel for the x86 and ARM (Raspberry Pi) platforms.

TryingToKnowYouBetter   **Nov 2019**

- The Indian Election Commission's website leaks data that can be analysed to effectively locate all registered voters.

Vitae   **Apr 2018**

- An Esoteric, Interpreted *Python*-built language built entirely with regular expressions.

Cache patches, Mozilla   **Sep 2018**

- Worked on patching cache entries that expire immediately in the cache core of *Mozilla C++* codebase.

CAPTCHA Study   **Mar 2017**

- An extensive study of CAPTCHA systems present on The Election Commission Of India's websites across all the states in India.