Amar Lakshya

+44 7873 957151

amar-laksh.github.io Flat 20 • amar-laksh Jarratt Hall, Dale Road

'A Chemical Computer computing on Digital Computers'

Projects & Contributions

LOGI'S CIRCLE OF SECURITY: github.com/amar-laksh/Logitech_pentest/blob/master/Report.pdf

- A full Penetration test conducted on Logitech's Circle camera.
- The test showed that the Logi Circle is well-secured.
- The product uses security principles like secure defaults and defence-in-depth to secure the device.

FOS - MADE TO BE OPEN: github.com/amar-laksh/fOS

- A Monolithic UNIX-like Kernel for the x86 and ARM (Raspberry Pi) platforms.
- ELF Parsing(with kernel parsing), PCI, Serial (ARM), Western Notes for PC Beeper and System Calls.
- Fully Functional Support for GPIO Pins (ARM) wrapped as Arduino-compatible functions.

TRYINGTOKNOWYOUBETTER: github.com/amar-laksh/TryinToKnowYouBetter

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

STUDY OF CAPTCHAS: amar-laksh.github.io/2017/03/16/CAPTCHAs-on-ceo-sites.html

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

CACHE PATCH (CORE), MOZILLA CONTRIBUTION: git log | grep amar on codebase

- Worked on patching cache entries that expire immediately in the Cache core of Mozilla codebase.
- Affects all Mozilla programs including Firefox and Thunderbird.

VITAE: github.com/amar-laksh/vitae

- An Esoteric, Interpreted python-built language built entirely with regular expressions.
- Designed to introduce non-technical people to programming.

REPLAYCER: addons.mozilla.org/en-US/firefox/addon/replaycer

- A fun Browser Add-on to replace content on the web.
- Able to replace live content like twitter feeds etc.

Work Experience

Sept 2018 - Feb 2019 SYSTEMS ENGINEER (LEAD): Nymble Labs (Bangalore)

- Revamping the entire software architecture to produce reliable, clean OOP code.
- Implementing the next iteration of the product using C++ 14, ROS2 and Qt5.

Dec 2017 - July 2018 SOFTWARE ENGINEER - INTERN: Nymble Labs (Bangalore)

- Designed a ROS2 based distributed software architecture of the system
- Designed an extensible Flask-based Web REST API for third-party devices.
- Designed coding standards and setup guidelines.
- Wrote the initial iteration of the software architecture in C++ 14.
- Wrote a Qt5 based display application for the on-board display.

July 2017 - Sept JUNIOR DEVELOPER (LINUX) - INTERN: Apogee Tech Global Inc. (Bangalore) 2017

- Designed a cross-platform architecture for the Internet Security Suite
- Implemented the application on Windows, Mac, & Linux using Electron, React and Redux
- · Created the backend functionalities using Python, Bash, and Ruby.

Publications & Certifications

COMPTIA SECURITY+ CERTIFICATIOn: youracclaim.com/badges/3ed437c4-0623-4e26-bdc7-4b9c58fc8bab

 Earners of the CompTIA Security+ certification have the knowledge and skills necessary to perform core security functions required of any cybersecurity role.

CROSSED & KNOTTED: amazon.in/Crossed-Knotted-Various-Authors/dp/8192997529

· Co-Author of Limca Book of Records winning - India's First Composite Novel - written in collaboration with 12 Authors.

BEYOND GOOD AND EVIL: amar-laksh.github.io/2017/06/17/beyond-good-and-evil.html

A paper focusing on the futility of recognizing Good and Evil as deterministic forces in the world.

Education

2019

2015

2017

2014 - 2017

2015

2014

Msc. Cyber Security, - 2019-2020 University Of Birmingham, Birmingham, UK Modules taken:

- Cryptography
- Intelligent Data Analysis (Extended)
- Operating Systems(Extended)
- Designing secure systems
- Forensics and Malware Analysis
- Hardware and Embedded Systems Security
- Network Security (Extended)
- Penetration Testing
- · Secure programming
- · Secure system management
- Security Research Seminar
- Research project

BSc. I.T., 3.26/4.00 - 2014-2017

St. Xaviers College, Mumbai - Autonomous

Modules taken:

- Applied Mathematics
- C++ Programming
- **Operating Systems**
- Computer Graphics Network Security
- Artificial Intelligence
- E-Commerce
- Data Warehousing and Mining
- Embedded Systems
- Advanced SQL
- Advanced Java
- C# with ASP.NET
- Software Testing
- Enterprise and Resource Planning
- Research project

Positions Of Responsibility

CLASS REPRESENTATIVE: St. Xaviers College, Mumbai - Autonomous

• Worked to organize events like seminars and workshops for the BSc. I.T. batch.

Public Relations Volunteer - Xenith: St. Xaviers College, Mumbai - Autonomous

· Worked on coordinating and organizing of Public Relations at different colleges for the IT Department Festival.

FOUNDING CORE MEMBER OF THE IT CLUB: St. Xaviers College, Mumbai - Autonomous

• Worked on designing and ideation of the IT Department Festival.

Technology Skills Acquired

PROGRAMMING LANGUAGES:

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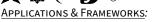






OPERATING SYSTEMS & DISTRIBUTIONS:







References

Ms. Lydia Fernandes St. Xaviers' College, Mumbai - Autonomous Professor at St. Xaviers' College lydia_fdes@yahoo.co.in, +91 9930280196