# Amar Lakshya

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Flat 20 Jarratt Hall, Dale Road Birmingham, UK - B29 6FQ

'A Chemical Computer computing on Digital Computers'

# **Projects & Contributions**

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.



# **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.



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

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



#### FocusTV: github.com/amar-laksh/focustv

• An extremely responsive face detection system which automatically pauses Media(YouTube and VLC Media Player) when you aren't looking.



#### TRYINGTOKNOWYOUBETTER: github.com/amar-laksh/TryinToKnowYouBetter

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

# Work Experience

Sept 2018 - Present

### 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.

# 2017

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

- 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 functionalites using Python, Bash, and Ruby.

# **Publications & Certifications**

COMPTIA SECURITY+ CERTIFICATION: https://www.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.

# 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:** 



2019

2015

2017

2014 - 2017

2015

2014

















**OPERATING SYSTEMS & DISTRIBUTIONS:** 

















#### **APPLICATIONS & FRAMEWORKS:**













# DATABASES:









# Education

**Msc. Cyber Security,** - 2019-2020 University Of Birmingham, *Birmingham, UK* 

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

St. Xaviers College, Mumbai - Autonomous

**xii<sup>th</sup>, 81.00%** - 2013-2014 St. Peters' College, Agra

**x<sup>th</sup>, 86.00**% - 2011-2012 St. Peters' College, Agra

# References

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