# Sumit Ghosh

New Delhi, India  $\cdot$  sumit@sumit-ghosh.com  $\cdot$  7585893944  $\cdot$  https://github.com/SkullTech

#### EDUCATION

# Indian Institute of Technology Delhi

Integrated BTech and MTech Computer Science

New Delhi July 2016 - Present

#### Relevant Courses

Data Structures, System Design and Computer Architecture, Programming Languages, Signals and Systems, Discrete Mathematical Structures, Linear Algebra, Calculus, Design Practices, Analysis and Design of Algorithms, Artificial Intelligence, Computer Networks, DBMS, Operating Systems, Automata and Theory of Computation, Parallel and Distributed Computing.

### Work Experience

Removeads https://removeads.org Sep 2018 - Present Lead Developer

• Cloud-based ad blocker backed by a DNS sinkhole.

- Implemented :: Automated VPS provisioning \* User authentication system \* GUI client app.
- Technologies used :: Python, Flask, Pi-Hole, DNS, PyQT.

Inboxer http://inboxer.io June 2018 - Present Lead Developer

- B2B email health and reputation management system.
- Implemented :: User authentication system \* Integration with DB \* Notification through Email
- Technologies used :: Python, Flask, MySQL, DNS, REST API.

# Department of Computer Science and Engineering

IIT Delhi

 $System\ Administrator$ 

September 2017 - Present

- Maintaining the computer systems and networks, responding to support requests.
- Technologies used :: Linux, Apache2, Reverse Proxy, VM, DNS, DHCP.

#### Freelance Consulting

Consultant Developer

Jan 2016 - Present

- Automated testing and QA \* Full-stack web development ° Scripting ° Web-scraping
- Technologies used :: Python, Selenium, Flask, Scrapy.

# SKILLS

Programming Languages • Proficient: Python

Java, C, C++, OCaml, VHDL, ARM Assembly, Go Programming Languages • Familiar:

Back-end Web Development: Flask, Django

QA Automation: Selenium, Pytest, unittest Web-scraping: Requests, Lxml, Scrapy

Sysadmin and Cloud Practices: Linux, Docker, Supervisord, AWS, Serverless

# Projects

# Contribution to Open-source Python, Sockets

Open-source on Github

- Projects by user-cont team at RedHat :: Conu and Colin.
- MusicBrainz Picard Website
- Mozilla's Webcompat Project: Webcompat Issue Parser and Autowebcompat.

# **PearSend** Python, Sockets

https://github.com/SkullTech/Pearsend

- CLI client for P2P file or message sending.
- Implemented protection against transmission error using CRC32 checksum.

### Goodgives Python, Web scraping

https://github.com/SkullTech/Goodgives

• CLI // Web app for auto entering giveaways in Goodreads. I love books, so why not get free ones!

# Journalist Python, Github API

https://github.com/SkullTech/Journalist

- App to write journal digitally using Markdown in your favorite text-editor.
- Store journals in a comprehensive directory structure, view them in browser, rendered in HTML.

### Designing an ARM Processor VHDL, Xilinx Vivado

• Best practices were implemented, e.g. dividing the CPU into data-path and controller, pipelining.

# Compiler Design Ocaml

• Designing a programming language, complete with its compiler.