# SARTHAK **SHAH**

# Scheme Hacker & Security Engineer

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#### **EXPERIENCE** –

Mercari, Inc.

May 2024 - July 2024

Security Engineering Intern

Tokyo, Japan

**KEY SKILLS: Threat Detection, Incident Response, Terraform** 

- Worked as a part of the Threat Detection & Response team.
- Wrote and deployed programs for sensing network scans and analyzing firewall logs.
- Wrote log routers and BigQuery views for the same and deployed them to the SOAR through Google Cloud PubSub using Terraform.

## **Google Summer of Code**

May 2023 - September 2023

Intern with the GNU Project

Remote

**KEY SKILLS: Operating System Development, Linux, Functional Programming** 

- One of the 2.2% of applications selected for the Google Summer of Code program.
- Worked on adding an interface for compile-time options to the Guix package manager.
- Project Completion Report and Source Code.

GeneNetwork

November 2023 - Present

Remote

Software Developer KEY SKILLS: WebAssembly, NumPy, Data Visualization

• Worked on building a Genome Browser for GeneNetwork, a project under University of Tennessee's Health Sciences department.

High Performance Computing Lab, BITS Pilani January 2023 - May 2024 **Assistant System Administrator** 

Onsite

**KEY SKILLS: System Administration, Networking, Incident Management** 

- · Worked as one of the Assistant System Administrators for the university's High Performance Computing cluster
- · Worked on access management, incident management, change management and capacity management of the cluster.

#### **EDUCATION & CERTIFICATIONS —**

University of Oxford **Undergraduate Thesis** 

2025

Oxford, United Kingdom

- Upcoming Thesis under Professor Kasper Rasmussen in the Cybersecurity domain
- Subject: Building an Over-the-air Bluetooth Fuzzer utilizing State Space Models

CompTIA Security+

October 2024

Link to verified credentials

Birla Institute of Technology and Science, Pilani MSc. Mathematics (Integrated, Hons.) Minor in Computing and Intelligence

2021 - 2025

**Networking:** Linux, TCP/IP, System Administration, Google Cloud Platform, Terraform, Azure, Automation and Scripting

Cybersecurity: Threat Detection, Incident Response, Cryptography, SOAR

Programming: Python, Go, Scheme, Git, Bash Scripting, CUDA, Fortran

Communication: English (Native), Japanese (Conversational), Team Leadership

#### **HIGHLIGHTED PROJECTS -**

Plyppy A Command-line Plymouth Boot Splash Generator written in Python TileEx A Tiling Pattern Extractor written in Go

Parameterized Packages for GNU Guix GSoC '23 Project adding Compile-Time Options to GNU Guix, a Transactional Package Manager

### **EXTRACURRICULARS** –

# Society for Open Software

June 2022 - Present

#### President

- Organized and spoke at six workshops that covered git, dual-booting, networking and shell scripting.
- Organized and hosted two CTF competitions.

Journal Club 2022

Editor-in-chief

Served as the Editor-in-chief for the annual Freshman magazine, Whisper in the Woods.

#### **ACHIEVEMENTS** —

National Supercomputing Mission GPU Hackathon	2022
Participant	IIT Bombay
A Supercomputing GPU Hackathon organized by Nvidia.	
Winner, IIT Goa's Cepheus CTF	2023
Runner up, IIT Hyderabad's Cipher-Cracking Contest "Enigma"	2023
Rank 3, NCFE-NFLAT	2017-2018

Gold Medalist, Queen's Commonwealth Essay Writing Competition 2015

LINKS -

Github: https://github.com/cel7t

Linkedin: https://linkedin.com/in/sarthak-shah-sos

Blog: https://blog.coldboot.org