

Devanshu Singla

Sophomore • Indian Institute of Technology, Kanpur

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KEY PROJECTS

MOVIE RECOMMENDER

Self Project | May 2021

devanshusingla/movie_recommendor

- Created a **movie scrapper** in **Python** to scrape movies based on user's preferences like movie categorie, rating, etc.
- Used python libraries like **Scrapy** for creating **web spider** to crawl websites and **Selenium** for scraping dynamic pages.

PRIVATE COMPUTATION USING CRYPTOGRAPHIC PRIMITIVES • SNT CLUB, IITK

Summer Project | May. 2020 - Jul. 2020

Crypto-IITK/Obliv-rust

- Implemented **Distributed Point Function (DPF)** library using the principles of **Function Secret Sharing (FSS)** in Rust.
- Learned various Cryptographic Primitives like **Function Secret Sharing (FSS)**, **Fully Homomorphic Encryption (FHE)**, **Yao's Garbled Circuits** and **Shamir's Secret Sharing (SSS)**.
- Explored **Multithreading**, **Memory Optimizations** and **Ownership Laws** in **Rust** language.
- Used libraries like **gtest** for creating unit tests and **google/benchmark** for benchmarking final code.

CAMPUS DISCUSS • SNT CLUB, IITK

Summer Project | Summers 2020

pclubiitk/Campus-Discuss-Frontend

- Implemented frontend of webapp **Campus Discuss** to be used as a platform for posting college events and related discussions through comments as part of **6**-membered group.
- Developed React components like recursive comment section for web-app using libraries like **ReactJs** and **Redux**.

OTHER PROJECTS

- Creating Game Theoretic-Models to analyze Biodiversity Conservation Problems | Course Project | Nov 2020 - Dec 2020
- Chromebot | Self Project | Summers 2020
- Infosec IITK | ACA Project | Jan 2020 - Apr 2020

TECHNICAL SKILLS

- **Programming:** C++, C, Python, Rust, JS, Bash
- **Libraries:** ReactJS, NodeJS, Express, Scrapy, Selenium.
- **Tools:** Git, Radare2, Ghidra, Cutter, \LaTeX .

EDUCATION

B. TECH, CSE

IIT Kanpur | Exp. 2023

CPI: 9.4/10.0

MODERN VIDYA NIKETAN SEC-17, FARIDABAD

Grade XII, CBSE: **96.4%**

ST. THOMAS SR. SEC. SCHOOL, FARIDABAD

Grade X, CBSE: **10 CGPA**

ACHIEVEMENTS

- **Academic Excellence Award**
For academic year 2019-20
- **AIR 191** | JEE Adv. 2019
- **AIR 182** | JEE Mains 2019
- **AIR 131** | KVPY 2018 (SX)
- Qualified for **INMO** 2019

RELEVANT COURSES

UG COURSES

- Data Structures and Algorithms
- Software Development
- Neural Networks and Deep Learning*
- Fundamentals of Computing
- Linear Algebra and ODE
- Probability and Statistics (*) - online

PG COURSES

- Modern Cryptology
- Game Theory and Mechanism Design

RESPONSIBILITIES

ACA PROJECT MENTOR

ACA IITK | Apr. 2021 - Present

- Taught basics of cyber security to 45 students through live lectures.

STUDENT GUIDE

Counselling Service IITK | Nov. 2020 - Present

- Helped six freshman to get acquainted with campus life and academics at IIT Kanpur.