Ankur Patil

Portfolio: ankur12-1610.github.io Mobile: +91-937-3942-506 Github: github.com/ankur12-1610 Email: ankur.patil.cd.mat20@itbhu.ac.in

EDUCATION

Indian Institute of Technology (BHU) Varanasi

Integrated Dual Degree (B. Tech + M. Tech) - Mathematics & Computing

Nov2020 - Present

CPI: 9.05

SKILLS

- Languages: [Proficient]: C++ [Prior Experience]: JavaScript, Python, Golang, Rust
- Frameworks: Django, Flask, ReactJs, NextJs, Cypress, Storybook, Pytest
- Development Tools: Git, GitHub, Postman, Linux, Heroku, Netlify, Vercel

EXPERIENCE

Kubernetes - Google Cloud Platform Project

March 2023 - May 2023

Linux Foundation Mentorship - CNCF, Software Engineer Intern

- \circ Developed **fast**, **lightweight** (around **5kb**) and **reusable** open-source **Lit**-based components
- \circ Tested components rigorously with 87% test coverage including Jasmine and Storybook testing
- Optimized the Golang based REST API, reducing page load time by 30% and debug time by 50%
- o Exposure: Lit Framework, Golang, TypeScript, Jasmine, Storybook

Silence Laboratories

Oct 2022 - Dec 2022

- Security Software Engineer Intern
 - o Comprehensively analyzed cryptographic algorithms implemented in Rust, ensuring proper code functionality
 - Implemented Dilithium in Rust, a PCQ scheme, resistant to brute force attacks from quantum computers
 - o **Exposure**: Rust, Cryptography

Element

Jul 2022 - Sept 2022

- Software Engineer Intern
 - o Implemented Knocking using ReactJs and Matrix SDKs, allowing users to send a request to join a space or room
 - o Developed Cypress tests and Unit tests, attaining 100% test scope and fixed UI bugs with 12+ merged PRs
 - \circ Created a GitHub Action for 9.8K+ starred repo, automating PR labeling process with 50+ requests per week
 - o Exposure: ReactJs, TypeScript, Cypress, GitHub Actions, SDKs

Specter Desktop

May 2022 - Aug 2022

- Summer of Bitcoin, Software Engineer Intern
 - $\circ \ \ {\rm Built\ a\ scalable\ and\ secure\ JWT\ Authentication\ System\ using\ Flask\ RESTful\ serving\ 260K+\ users\ to\ date}$
 - o Created Pytests and ran a local Bitcoin-Core node on regtest to mine test coins, achieving 100% code coverage
 - Updated the API documentation of Specter Solutions, enhancing the overall user experience
 - $\ \, \bullet \ \, \textbf{Exposure} \colon \textit{Flask, Pytest, REST APIs, Access Tokens, Bitcoin Core} \\$

PROJECTS

• Futures on Chain — Python, React, TypeScript, Move, DeFi, Aptos Blockchain

github.com/futures0xC

- o Developed a decentralized futures trading platform, Futures on Chain, on Aptos Blockchain.
- $\circ \ \ Created \ market \ data \ API \ to \ fetch \ market \ details \ and \ \textbf{Transaction} \ \textbf{CLI} \ using \ \textbf{aptos-sdk} \ for \ seamless \ order \ placement$
- Integrated Decentralized Exchange for underlying commodity trading to get decentralized market data
- SnapX Node.js, GraphQL, Gatsby, Cryptography, Blockchain

github.com/snapx

- $\circ \ \ \mathbf{First\text{-}of\text{-}its\text{-}kind}, \ \mathbf{SnapX} \ \mathrm{is} \ \mathrm{a} \ \mathbf{MetaMask} \ \mathbf{Snap} \ \mathrm{powered} \ \mathrm{with} \ \mathbf{notifications} \ \mathrm{and} \ \mathbf{account} \ \mathbf{recovery} \ \mathrm{features}$
- Built a Gatsby frontend integrated with AES and biometric authentication using Node.js for account recovery
- Developed a notification system that sends periodic GraphQL requests via a cronjob to APIs, delivering notifications to the native browser and Metamask extension
- Paper to Motion Python, ChatGPT, OpenAI API, Stable Diffusion

github.com/paper2motion

- o Developed a Python-based command-line interface (CLI) that seamlessly converts PDFs into videos
- Extracted content from PDF using PyPDF2 and ran a local ChatGPT node to generate summaries and prompts
- o Generated images from prompts using Stable Diffusion API and transformed content into video with Rephrase.ai

Honors and Awards

- Led a team of 6 to win a Silver Medal in Aptos Labs Challenge, InterIIT Tech Meet 12.0
- Led a team of 8 to win a Silver Medal in Consensys' Metamask Snap Development Hackathon, InterIIT Tech Meet 11.0
- Selected as one of the **Top 83** interns out of 20K applicants in **Summer of Bitcoin '22**
- Selected as one of the **Top 60** interns out of 10K applicants in **The Linux Foundation '23**
- Recorded around 1.3k opensource contributions on GitHub & have 3.3k+ views on my personal blog
- Delivered a talk at Metamask Community Call, addressing an audience of 1.2k+ developers.
- Secured a Global Rank 210, 212 and 262 in CodeChef Starters 83, 90 and 89 respectively
- Serving as the Google Developer Student Clubs (GDSC) Lead of IIT BHU (2023 Present)