Arnab Sen

✉ arnabsen1729@gmail.com 🔗 arnabsen.dev in arnabsen1729 ◯ arnabsen1729

EXPERIENCE

SWE (L4), *Google*   Jun 2023 – present | Bangalore, India
- **Led the design and launch of an end-to-end ML system** to recover privacy-impacted View-Through Conversions, projected to generate **$XXM in annual revenue** and achieve competitive parity with other major ad platforms like Meta, TikTok.
- Engineered a high-throughput data processing pipeline to handle **~20 billion daily ad impressions** and implemented a TFX-based machine learning model for conversion prediction.
- Collaborated with cross-functional teams including Data Science, Ads Privacy, and Bidding to align on project goals and ensure successful delivery.
- Promoted to **L4 Software Engineer** in 2024 with an **"Outstanding Impact"** rating for significant contributions to core projects
- Worked with Tensorflow, *C++ (received readability), Flume, SQL, Python.*

AR/VR Intern, *GMetri* ⧉   Apr 2023 – Jul 2023
- Worked on the toolkit to generate dynamic metaverse based on user input utilizing OpenAI's GPT model.
- Designed and implemented a user-friendly UI for creating AI Brains and uploading information to populate and personalize their metaverse.
- Executed API integration to ensure the full functionality of the product, enabling smooth communication between different components.
- Tech Stack: *React.js, Typescript, Storybook, Node.js, Docker*

SDE Intern, *Cypherock* ⧉   Oct 2022 – Mar 2023
- Successfully integrated new protocol and server APIs to facilitate cryptocurrency exchange for users.
- Developed and integrated swap functionality for multiple cryptocurrencies including Bitcoin, Ethereum, Polygon, Solana, & ERC20 tokens in device firmware.
- Designed and implemented user-friendly swap functionality screens in the desktop application.
  Tech Stack: C++, STM32 microcontrollers, Typescript, React.js, Electron.js, Redis, MongoDB.

SWE Intern, *Google* ⧉   May 2022 – Aug 2022 | Bangalore, India
- Implemented an email-based notification system for an Ads Resource Engineering Team.
  - Explored the various notification platforms available at Google to select the best fit for our use case.
  - Prepared a detailed design doc for the implementation with the component overview, workflow diagrams, etc.
  - Integrated the notification system with a feature to demonstrate its working.
- Implemented features, fixed bugs, & performed unit testing in an internal Ads Planning Tool.
- Worked with *Java* in the backend and *Angular JS* & *Javascript* in the front end.

Student Intern, *Summer of Bitcoin* ⧉   Jul 2021 – Sep 2021
- Improved support for User Statically Defined Tracing (USDT) in Bitcoin core by adding new tracepoints and scripts, leveraging eBPF (extended Berkeley Packet Filter) technology.
- Learned Bitcoin Protocol Development**.**
- Conducted a session on "Bitcoin Script" with an audience of **150**.
- Worked mainly with *C++, gdb, Python***,** and *Makefile*. (PRs: *PR-1* ⧉ , *PR-2* ⧉)

EDUCATION

B.Tech, *Indian Institute of Engineering Science and Technology* ⧉   2019 – 2023 | Shibpur, India
Stream: **Computer Science and Technology** (CGPA **9.62**)

SKILLS

Languages — *C/C++, Python3, Javascript, Golang, Java, Typescript* ● **Frameworks** — *React JS, Vue3, Bootstrap, Tailwind, Flask, Ruby on Rails, Express Js* ● **Others** — *Firebase, MongoDB, Postgresql, Linux, Docker, Git*

AWARDS

Cyber-Security Hackathon by, *RISE* ⬀   Sep 2022
   2nd position among **22k participants** in the Cybersecurity Hackathon.

Codevita 2022, *TCS*   Apr 2022
   Ranked **98 globally** among **136,054** students (from **34** countries) in Round 2.

Hashcode 2022, *Google*   Feb 2022
   All India Rank of **25** and a global rank of **311** with a score of 3001126 pts.

ICPC Asia Kanpur-Mathura Regionalist 2020, *ACM-ICPC*   Aug 2021
   Ranked **72** among **200+** teams.

Summer of Bitcoin ⬀   Jun 2021
   Among the **50** students that were selected out of **5000+** applicants.

Best Hardware Hack, *Major League Hacking* ⬀   Jan 2021
   Won the 48 Hour hackathon in the Hardware Category.

CoronaSafe Engineering Fellowship Program, *AICTE* ⬀   Jan 2021
   Secured a rank in the top **24** out of **50,452** applicants.

XROS Fellowship, *Reskill, FICCI, Digital India, Meta* ⬀   Apr 2023
   Among the top **100** candidates selected out of **10,000** applications & 2,500 project proposals.

CODING PROFILES

- **Leetcode** rating **2006**, top 2.31%. ***arnabsen1729*** ⬀
- **Codeforces** rating **1644** tagged Expert. ***arnab1729*** ⬀
- **CodeChef** rating **1841**, 4-stars. ***arnab1729*** ⬀
- **CTF Time** all India ranking **76** and **1116** globally. ***0xw3bs3c*** ⬀

BLOG

https://arnabsen.dev
- Technical Deep Dive articles on core computer science topics like Graph Databases, Compression Schemes, etc.
- 1.7k views per month.
- 700+ users per month.
- 2 blogs features on Hashnode.