C Y K SAGAR

Software Engineer | Robotics Research

@ cyksagar@pm.me +91 9121481241 @pscyk cyks.in

EDUCATION

International Institute of Information Technology, Hyderabad

B. Tech in Computer Science and Engineering

2019 – 2023 CGPA: 8.13

ACHIEVEMENTS

- **Merit List Awardee** for excellence in academic performance. *(2020-21)*
- AIR **1311** in **JEE Advanced** (2019)
- Achieved AIR **740** in **JEE Mains** *(2019)*
- Recipient of **K**ishore **V**aigyanik **P**rotsahan **Y**ojana **Fellowship** with All India Rank **72** in SA stream *(2018)*
- ★ Qualified to the finals in Amrita INCTF Nationals, and finished 24th. *(2022)*

PUBLICATIONS

- Swiss Cheese CAPTCHA: A Novel Multi-barrier Mechanism for Bot Detection **Accepted to SAC '25: 40th ACM/SIGAPP Symposium on Applied Computing.**

SKILLS

Languages: Python, Java, Golang, C, C++, JavaScript, Bash, SQL
Infrastructure: AWS, Kubernetes, Docker, Temporal, Ansible, GNU/Linux, Nix, CI/CD
Databases: PostgreSQL, ClickHouse, MongoDB, MySQL, Redis, RabbitMQ
Observability: OpenTelemetry, Datadog, Grafana, Prometheus
Frameworks: FastAPI, Django, ReactJS, NodeJS, Git

POSITION OF RESPONSIBILITY

Teaching Assistant | **Software Systems**,
★ Responsible for teaching, conducting labs, making and grading assignments and exams.

Member | **Hacking Club**
- Reported a root privilege escalation bug in our college web server.
- Problem setter for CTF challenges, primarily on cryptography and game hacking.

RESEARCH & EXPERIENCE

Robotics Research | Career Break *(Sep 2026 - Present)*

- Exploring **mobile manipulation with imitation learning and reinforcement learning**, focusing on compact models.

Co-founder & CTO | Oxcorp *(May 2026 - Sep 2026)*

- Built an AI-powered campaign platform with creator matching and pricing based on verified views.
- Built data pipelines for audience matching and fraud detection, including an **Instagram scraper**.
- Built **Hypecut** for automated highlight selection, captions, and speaker-aware vertical video framing.

Founding Engineer | Crustdata (YC F24) *(Jan 2025 - Mar 2026)*

- Shipped the **MCP server** for Crustdata's real-time API, enabling nontechnical users to query company and people data through Claude and Codex.
- Scaled **people enrichment** to **100M+ profiles/month**, improving throughput and data coverage.
- Built the **business email enrichment service** end to end, a leading revenue-driving feature.
- Designed **Temporal workflows on Kubernetes** for millions of enrichment tasks; maintained ETL pipelines and shipped customer-requested API features.

Backend Developer (SDE2) | A23 Games *(Jun 2023 - Jan 2025)*

- Built **Java microservices** for multiplayer games, including skill-based matchmaking and two-player rematches.
- Built tournament monitoring, daily reports, and **RabbitMQ alerts**; optimized game algorithms and handled server scripting and incident response.

Undergraduate Researcher | CSTAR *(May 2022 - May 2023)*

- Developed sensor-based CAPTCHA designs and prototypes for bot-detection research.
- Collaborated with Dr. Ankit Gangwal to develop a blockchain-based unified KYC framework.

R&D Intern | Samsung Research *(May - Jul 2022)*

- Evaluated feature extraction and similarity methods for wearable accelerometer and gyroscope data on the On-device AI team.

Fullstack Developer | Product Labs (now sync.so) *(Jan - Apr 2021)*

- Built a multilingual avatar teaching platform with translation and lip-sync APIs, **React**, **Node.js**, **Express**, and **MongoDB**.

PROJECTS

- **Homelab | Docker, Caddy, OpenTelemetry, SigNoz**
  Self-hosted 10+ services with observability.
- **SplitBot | Golang**
  Telegram bot for bill splitting and group finance ledgers.
- **Syck Shell | C, Syscalls**
  Shell with processes, pipes, redirection, and built-ins.
- **Vaccine Drive Simulation | C, Threading**
  Vaccination simulation using threads and semaphores.
- **Modified xv6 | C, Scheduling**
  Added syscalls and priority, MLFQ, and FCFS schedulers.