

Academics

2022 | *B.Tech + M.Tech (Dual Degree) in Computer Science and Engineering, IIT Kharagpur* with 8.7/10.0 GPA
With Micro-Specialization In Entrepreneurship And Innovation

Experience

Sep '21	Game Backend Developer: Project BLACK	LILA Games, Bangalore
-	<ul style="list-style-type: none">- Planned, designed, and set up Backend for Project BLACK using Heroic Cloud's <i>Nakama</i> as Backend-As-A-Service in GoLang with end-to-end CI/CD and documentation generation using GitHub Actions, Postman, and Heroic Cloud.- Extended the Backend to support Live-Ops and built front-facing tools for developers using <i>appsmith</i>; an open-source low-code admin tool, reducing costs by 80% to only infrastructure costs.- Used Protobuf for model sync between Unity, Backend, and other tools, reducing de-serialization memory costs at game load.	
May '21	Software Engineer: User-Master Team	Mercari, Tokyo
Jun '22	<ul style="list-style-type: none">- Designed process for migration of the monolith Mercari REST APIs (PHP) serving master data into gRPC micro-service (Golang) to optimize infra-cost, decouple independent data and increase maintainability.- Designed & developed i18n middle-ware for Mercari's microservices-kit, reduced engineering hours for client-config updates to 0 from 4hrs/week and refactored the microservices' code to improve extensibility.- In line with OpenSource culture, improved org-wide documentation for QA, release processes, and decommissioning micro-services; optimizing costs (2M Yen/Annum) and improving production-release speed and security.	
May '20	FullStack Intern: Skillbee IPI Connect	Skillbee, Noida
Jul '20	<ul style="list-style-type: none">- Identified and optimized memory-leak by analyzing NodeJS heap usage pattern to achieve five-nines availability.- Co-created architecture and implemented <i>fan-out on write</i> global and <i>fan-out on read</i> personal activity feed using <i>Stream Framework</i> and <i>Elasticsearch</i> respectively - reducing avg. feed generation time from 4 secs to 300 ms.	
May 19	Student Software Developer: Sample Platform	CCExtractor, Google Summer of Code 2019
Aug 19	<ul style="list-style-type: none">- Implemented code sanity checking mechanisms, increased unit-test coverage from 60.2% to 90.1%, implemented database migration methods and improved time estimation algorithm's accuracy with DB schema modification.	
May 19	Backend Engineering Intern: Income Tax Filing Tool	ClearTax, Bangalore
Jul 19	<ul style="list-style-type: none">- Updated ITR-2, ITR-3 and ITR-4 filing to 2018-19 fiscal-year schema while retaining backwards compatibility.- Improved DevOps using IIS Manager, Scalyr, Spinnaker and TensorFlow (with OpenCV and Keras) to setup up better logging, improved automation and Income Tax Department's captcha solver (achieving 94.3% accuracy).	
Dec 18	FullStack Intern: VWO	Wingify, New Delhi
Jan 19	<ul style="list-style-type: none">- Dockerised (from Vagrant) components of VWO reducing cloud migration and production setup time by 80%.- Optimized data queries and reliability with UX changes reducing the campaign creation dropout rate by 30%.	
May 18	Student Software Developer: Project Nephos	CCExtractor, Google Summer Of Code 2018
Aug 18	<ul style="list-style-type: none">- Authored head-less tool to automate recording, processing and uploading IPTV streams for the University Of Navarra, Spain and others - increasing throughput by over 400+% with no human intervention required to handle failures.	

Projects

- **CareShare, Lead Developer**
Developed at **Zealth-AI (YC-W21)**, a platform (in TypeScript) for remote monitoring and diagnosis of Covid-19 & Cancer patients with i18n support. The product was pilot tested at 50+ hospitals, including *PGI Rohtak* and *AIIMS*.
- **CloudCron, Polyglot.Network**
Software as a Service (SaaS) platform (in Python) to ease the setting up and execution of cron-tasks; developed with stack comprising of GCP (AppEngine, CloudSQL, PubSub, CloudScheduler, Kubernetes Engine), Django and PostgreSQL.
- **ConnectAll, Hack-A-BIT 2019**
Developed in 36 hours, ConnectAll is a platform that enables specially-abled to easily interact with conventional tech.
- **DigiCon, OpenSoft 2018 IIT Kharagpur**
Gold-winning entry to the Inter-Hall Opensoft, IIT Kharagpur; generates digital prescriptions from doctor's handwritten.

Activities & Leadership

- **Office Setup, Mercari India:** Streamlined targeting of hiring process & referral campaign, improved employer branding initiatives, and lead technology meet-up sponsorships for setting up **Center of Excellence** in Bangalore, India for Mercari, JP.
- **OpenSource Involvement:** Mentored **Make SwagLyrics Great Again** and **Sample Platform** in GSoC 2020 and GSoC 2021-2022, and high school students for GCI 2018 and GCI 2019 under **CCExtractor**, top mentor for **GirlScript Summer of Code (GSSoC)**

2018 and Sol 2019, IIT Dharwad. I've successfully conducted [Kharagpur Winter of Code 2018](#), [GSSoC 2019](#), and [GSSoC 2020](#).

- **InfoSec, Inter IIT Tech Meet:** 1st position (among 22 sister IITs) in Saptang Lab's Network Security Hackathon and 4th position in Payatu's Jeopardy Style CTF respectively in Inter IIT Tech 9.0 (IIT Guwahati) and Inter IIT Tech 8.0 (IIT Roorkee).
- **Head of Technology, IIT Technology Ambit:** Lead a team of 6 developers to provide sustainable and easy-to-maintain services for digital distribution of content with [open-source solutions](#), estimated to serve 2000+ users on monthly basis.
- **Maintainer, MetaKGP IIT Kharagpur | Executive Member, KOSS IIT Kharagpur:** Responsible for promoting and maintaining open-source culture and [tools](#) (campus-centric) such as knowledge wiki, APIs, timetable manager, scrappers and bots.