

Academics

2017-2022 | *B.Tech + M.Tech (Dual Degree)* in **Computer Science and Engineering**, IIT Kharagpur
GPA **8.61/10.0** (Ongoing)

Experience

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| May '20 | FullStack Intern: Skillbee IPI Connect | Skillbee, Noida |
| Jul '20 | <ul style="list-style-type: none">- Implemented caching and optimized retrieval of analytic data, reducing average time from 1.3 min to 224 ms.- Analyzed Node heap usage pattern and refactored code to reduce memory footprint, modularised WhatsApp chatbot flow, improved docker inter-container networking, created scripts to automate mundane tasks, etc.- Fabricated 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, increase 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 backward 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 | Software Engineering Intern: VWO | Wingify, New Delhi |
| Jan 19 | <ul style="list-style-type: none">- Dockerised core components of VWO reducing migration and production setup time roughly 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 University Of Navarra, Spain and others - increasing throughput by over 400+% with no human intervention required to handle failures. | |

Projects

- **CareShare, Lead Developer**
Developing at Singaporean health startup **Zealth-AI** incubated by *Antler*, a platform for doctors and hospitals to keep track of discharged and asymptotic Covid-19 patients with multi-lingual support aimed at Indian patients. The product is being used by 50+ hospitals including prestigious ones like *PGI Rohtak* and *All India Institute Of Medical Science (AIIMS)*. Currently, I'm fostering the product development to incorporate tracking ICU admittees, Cancer patients, etc.
- **CloudCron, Polyglot.Network**
Software as a Service (SaaS) platform to ease the setting up and execution of cron-tasks; developer with stack comprising of GCP (AppEngine, CloudSQL, PubSub, CloudScheduler), Python, PostgreSQL, Kubernetes API and more.
- **DigiCon, OpenSoft 2018 IIT Kharagpur**
Gold winning entry to the Inter-Hall Opensoft, IIT Kharagpur; generates digital prescription from doctor's handwritten.
- **ConnectAll, Hack-A-BIT 2019**
Developed in 36 hours, ConnectAll is a platform that enables specially-abled to easily interact with conventional tech.

Technical Skills

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| Languages | JavaScript (Node.js), Python, C, Golang, PHP, Java, Ruby |
| Libraries / Frameworks | OpenCV, .NET Core, SpringBoot, Flask, Django, ASP.NET, Ruby on Rails |
| Data Storage / Handling | MySQL, SQLite, MongoDB, PostgreSQL, Elasticsearch |
| Systems / Platforms | Heroku, Azure, GCP, AWS, Pivotal Platform, Digital Ocean |
| Sys Admin / Technologies | Docker, GraphQL, Protobuf, Nginx, Prometheus, Grafana |

Activities & Leadership

- **OpenSource Involvement:** Mentored **Make SwagLyrics Great Again** and **Sample Platform** in GSoC 2020 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**.
- **Team Member, InfoSec, Inter IIT Tech Meet:** Bagged fourth position (competing against other 22 sister IITs) in Jeopardy Style Security CTF organised by **Payatu** in Inter IIT Tech Meet 8.0 held at IIT Roorkee from 20 - 22 December 2019.
- **Head of Technology, IIT Technology Ambit:** Lead a team of 6 developers to provide sustainable and easy-to-maintain services for digital distribution with complete **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.