

Work Experience

| Software Engineering Intern | DreamSol Telesolutions | Summer 2018 |
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- Worked on building a phonebook management web application.
- Developed CRUD operations, access management, and other relevant features using Java Struts 2 web framework.
- Developed the frontend for the application with Twitter Bootstrap and JS libraries such as AMCharts.

| Backend Developer, Event Head | CyberHawk and HawkEye | Spring, Fall 2018 |
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- Organized and developed the web application for an online cryptic hunt that attracts participation from over 2000 players globally with a team of 10 developers and designers.
- Designed and developed a RESTful web API in Go with MySQL database.
- Implemented Push Notifications using Firebase Cloud Messaging.
- Managed deployment on a Digital Ocean VPS.
- Mentored 4 juniors on project relevant concepts such as server-side development with Go, authentication and authorization, databases and ORMs.

| Treasurer | IECSE | Fall 2016 - Present |
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- Manage the fund and financing for the official CS club.
- Develop and manage IECSE's internal tools as a part of the development team.
- Conduct workshops on various topics such as web APIs, web scraping, version control, databases, Python, Node.js.
- Mentor the working and management committees via in-semester projects, summer and winter guidance sessions and workshops.
- Contribute articles to IECSE Hashtag, a technology column.
- Work with the Sponsorship Head to approach tech companies for event collaborations.

Technical Experience

Languages and Technologies

- **Languages:** Python; Javascript; Go; Java; C/C++
- **Databases:** MySQL; MongoDB
- **Frameworks:** Node.js, Express.js; Flask; Struts-2

Projects

- **Hospital Admin:** Web app to manage general administration of a hospital such as admitting, discharging, billing patients and checking room availability. Developed using Express.js, MySQL, EJS templating and Redis.
- **Firebase Money Tracker:** Money tracking application developed using Firebase features including Authentication, Realtime Database, Hosting and Cloud Functions. Developed for the session on getting started with Firebase which I conducted at Developer Students' Club Manipal's DevFest 2018.

- **Competitive Coder's Bot:** Telegram bot developed with Python and Flask to stay updated with upcoming competitive coding contests. Uses BeautifulSoup python library to scrape information from judges. Also consumes CTFTIME API to show upcoming CTFs. Deployed on Heroku.
- **IECSE's Member Portal API:** Developed GraphQL API for a web app that brings together all members of IECSE providing features for like event updates and tutorials. Used GraphQL with MySQL and Node.js with Express.js for implementing the API.
- **Time-Based OTP:** Go implementation of IETF's RFC 6238 to generate a Time-Based One Time Password. This library can be used to generate TOTP's using common HMAC algorithms such as SHA1, SHA256 and SHA512.

Education

**B.Tech Computer Science
And Engineering**

Manipal Institute Of Technology

**Fall 2016 -
Summer 2020**

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- B.Tech Computer Science And Engineering, May 2020, CGPA 8.51 (Sophomore/Second Year)
 - Undergraduate Coursework: Data Structures, Algorithms, Database Systems, Computer Networks, Operating Systems.

Competitive Coding

I actively compete in programming competitions to on various online platforms such as Hackerrank. My profile is :

- Hackerrank: Overall Rating 1933 (Username: kelsier27)