Shrey Tripathi

International Institute of Information Technology, Bangalore

Education

International Institute of Information Technology, Bangalore

Integrated Masters in Technology, Computer Science and Engineering

CGPA: 3.18/4.00

Experience

MathWorks

May 2023 - July 2023

Aug 2019 - July 2024

 $EDG\ Intern$

- · As an intern in the Engineering and Development Group (EDG), worked on re-designing the report generated by the Simulink Model Advisor, which identifies inaccurate or inefficient modeling conditions and configuration settings to improve simulation accuracy and efficiency.
- Used JavaScript to make the report visually appealing and interactive, and used object-oriented programming techniques to create a Reporter class using the MATLAB Report Generator, that defines the DOCX, PDF, and HTML reports.

Web Science Lab, IIIT Bangalore

Jan 2021 - May 2021

Developer

- Built the first version of a Capacity Based Access Control (CBAC) portal for the Indian Urban Data Exchange (IUDX) framework, under the supervision of Professor Srinath Srinivasa.
- Successfully developed the basic functionalities from scratch: user authentication, world initialization, role selection, role modeling, and role(privilege)-based data access.

Mentorship

Teaching Assistant

Aug 2022 - Dec 2022

CS303 Software Engineering

IIIT Bangalore

• Interactive teaching and tutorial sessions on various topics relating to Software Engineering concepts and methologies.

Projects

Swasthya Suraksha: A streamlined ABDM framework | React, Spring | Report, Links

Jan 2023 — May 2023

- Swasthya Suraksha is a framework that acts as a trusted intermediary for seamless exchange of medical records of a patient given their consent, among different hospitals, without storing the health records.
- Contributed in creating the EHR format for health records across establishments, and in sharing the filtered EHR data on consent verification.
- Implemented EHR data sharing through a dataPostUrl, whenever a pre-consented establishment requests for the data of a specified patient.

Just-post-it | Django, Javascript, AJAX, PostgreSQL | GitHub, Demo

Aug 2020 — Sep 2020

- Developed a full-stack web-based Twitter-like social networking application.
- Created a Rest API in Django, while connecting it to a PostgreSQL database.
- Used AJAX to implement a single-page application for the front-end that lets users like/unlike posts and edit their own posts in real-time without a page reload.

Publications and Contributions

Automated Application Processing

• Sharma, E., Chakrabarti, S., [et al, including **Tripathi**, S.] (2022) Automated Application Processing. Sadhana 47, 244 (Indian Academy of Sciences). Software Engineering Lab, International Institute of Information Technology Bangalore. doi.org/10.1007/s12046-022-02022-x

Open Source Contributions

• Contributions to open-source projects: Open Library (The Internet Archive), TWLight (The Wikipedia Library), and Mathesar (Center of Complex Interventions)

Technical Skills

Languages: Java, Python, C, C++, JavaScript, SQL

Technologies/Frameworks: React, Django, Flask, Maven, Spring, Kubernetes, Figma, Docker, Git

Relevant Coursework

Data Structures and Algorithms, Operating Systems, Software Architecture, Database Systems, Software Testing, Software Production Engineering, Programming Languages, Machine Learning, Cloud Computing, Computer Networks

Achievements and Extracurriculars

- 2022 Smart India Hackathon Winner (MoE, Government of India); Google Developer Student Club (GDSC) Lead (2021-22); GATE 2022 Qualified (All India Rank 2899)
- 2021 Tezos India Fellowship Awardee (Tezos India); LiFT Scholarship Awardee (The Linux Foundation)
- 2020 Academic Excellence Award (Academic years 2017-18 and 2018-19) (Airport School, Ahmedabad)
- 2017 NTSE Scholarship Awardee (National Council of Educational Research and Training (NCERT))