Sachin Kumar Singh

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EXPERIENCE

Google Summer of Code'20

The GNU project

Student Developer at GNU-Astro

May 2020 - August 2020 (ongoing)

https://summerofcode.withgoogle.com/projects/#4950581673721856

- Made a library and a CLI interface to inter-convert different distortion types present in different astronomical datasets providing uniformity when different software are used in an analysis pipeline.
- Working on a library to match astronomical images within large catalogue by using reverse index method. The library is highly modular than existing software and is written entirely in C making it highly scalable and efficient.

• India Linux User Group

Delhi NCR

Open Source contributor

https://github.com/ILUGD

• Made contributions to their messaging bot providing more functionality and improving code quality.

Projects

- Book Reviewer (https://github.com/sachinkumarsingh092/book-reviewer)
 - o Book reviewing web application allowing users to register themselves and rate and review books from a large catalogue of books.
 - o Built with Flask, jinja2 templating, Bootstrap CSS, PostgreSQL, goodreads developer-API and hosted on Heroku.
- Otaku-chat (https://github.com/sachinkumarsingh092/Otaku-chat)
 - A realtime chatting web application providing multiple rooms to chat inspired by slack.
 - Features include creating and joining multiple channels, saved sessions even after closing the browser, deleting sent messages and more.
 - Built with Flask, Javascript, FlaskSocketIO, jinja2 templating, Bootstrap5 CSS, PostgreSQL and hosted on Heroku.
- Bitmap Filters (https://github.com/sachinkumarsingh092/bitmap-filter)
 - A fast and efficient bitmap filter to convert uncompressed bitmap images, written entirely in C.
 - Current filters include grayscaling, blurring, reflecting the image and detecting its edges.

Achievements

• Paytm Build for India Hackathon

Won 1^{st} runner-up prize for building a website to be used by an educational organisation, where the same website can be used by students, teachers and administrators to organise their individual programs.

• NIT-H CTF

Won 2^{nd} runner-up prize in Capture The Flag(CTF) conducted by cybersecurity club of NIT-Hamirpur.

Programming Skills

• Languages: C/C++, Python, Javascript, SQL, Shell scripting, Java, HTML, CSS

• Technologies: GNU/Linux, Git, Heroku

• Frameworks: Flask

EDUCATION

• University School of Information, Communication and Technology

GGSIPU, New Delhi

Bachelor of Technology(Information Technology); CGPA: 7.6 Aug. 2018 - July. 2022(Expected)

• Pratap Public School

Karnal, Haryana

Higher Secondary; 93% in high school.