

Shivansh Rakesh

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EDUCATION

INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY, HYDERABAD

B.TECH. IN ELECTRONICS AND COMMUNICATIONS ENGINEERING

2018-2022 | CGPA: 8.43/10

Dean's List-1 Awardee : Among top 5% students ranked according to academic performance in a semester

DELHI PUBLIC SCHOOL, B.S. CITY

2004-2018 | CBSE Board

10th: 10 CGPA | 12th: 93.6%

RELEVANT COURSES

- Computer Programming
- Data Structures & Algorithms
- Intro to Processor Architecture
- Compilers (Stanford Online)
- Technical Support Fundamentals (Google)

SKILLS

PROGRAMMING

Over 5000 lines:

Python • Java • JavaScript

Over 1000 lines:

Django • C/C++ • XHTML • HTML & CSS

MISC

Linux • Shell Scripting • Matlab • Machine Learning • Git • MySQL • Verilog • LaTeX • AWS

PROJECTS

THE COOKIE SITES

www.thecookiesites.com

A SaaS project which builds and hosts websites on the go.

TIME-VARYING WEATHERING IN TEXTURE SPACE

An implementation of [this paper](#).

The project synthesizes a series of textures from an input texture emulating a weathering and de-weathering processes, yielding a time-varying texture.

SR-SHELL

A linux shell built using C language ([link](#))

MIPS PROCESSOR

A MIPS processor designed using Verilog ([link](#))

A 2-staged pipelined MIPS processor with Fetch stage and Decode/Execute stage having a modular implementation.

VGA CARD

A graphics controller for VGA screens using Nexys2 FPGA ([link](#))

Used an FPGA as an interface between the Display and the computer's color vs timing signal generated using a python script.

AUDIO AMPLIFIER

A fully functional Audio Amplifier, with Noise Reduction, Bass-Treble-Volume Control and a gain of around 500, to drive a 5W speaker.

WORK EXPERIENCE

JPMORGAN CHASE & CO. | SUMMER INTERN

Quantitative Research Analyst | Full Time | May 2021 - July 2021

GOOGLE SUMMER OF CODE | STUDENT DEVELOPER

Organisation: OpenMRS | Remote, Full Time | June 2020 - August 2020

- Worked on a Java module development project: **Add support for FHIR Narratives** to the Medical Record System of OpenMRS.
- Implemented a **framework** to support user customization of narratives, which are human readable representations of Fast Healthcare Interoperability Resources.
- Implemented language based localisation of narratives.
- Created **dynamic XHTML templates** (rendered using Thymeleaf, a Java Template Engine) for default narratives of all resources.
- [GSoC'20 Work Report Link](#)

COMPUTER SYSTEMS GROUP LAB | UNDERGRADUATE RESEARCHER

IIIT Hyderabad | May 2020 - Present

- Working under Dr. Suresh Purini on **Compiler Optimization using Machine Learning**.

REDWOOD EDA | WEB DEVELOPER

Massachusetts, USA | Remote, Part Time | March 2020 - April 2020

- Developed the UI for a webapp using **React.js** and a standalone component for server-client interactions to showcase the power of FPGAs.
- Developed a **React.js Webapp** to showcase the power of FPGAs through hardware (FPGA) accelerated rendering of fractal images.
- Simplified server-interactions for render requests through a **standalone web component**.

KIDSSENS | SOFTWARE ENGINEERING INTERN

Hyderabad, India | Part Time | Nov 2019 - Dec 2019

- Maintained an **AWS EC2 server** with a Django based website hosted on it.
- Ensured robustness of the server with **no server failure** throughout the term.

AIDED | SOFTWARE ENGINEERING INTERN

Hyderabad, India | Part Time | Aug 2019 - Oct 2019

- Worked in development of a **Django webapp** to aid database management.
- Added dynamic capabilities to an initially static site and **simplified user data management**. Configured an EC2 server for secure hosting of the website.

EXTRACURRICULAR ACTIVITIES

- **Virtual Experience Program Participant** | July'20
JPMorgan Chase & Co. ([Certificate Link](#))
- **CANSAT'20 Team Leader** | Nov'19 - Feb'20
Worked in designing a satellite with payload as a Delta Wing Glider. Achieved an overall team score of 88.95/100.
- **Director of Technology at Pentaprism, IIIT Hyderabad** | Jun'20 - Present
The Photography Club of IIIT Hyderabad
- **Designer at E-Cell, IIIT Hyderabad** | Jan'20 - May'21
Entrepreneurship Cell, IIIT Hyderabad
- **Designer at Ping!, IIIT Hyderabad** | Oct'19 - May'21
Student Media Body of IIIT Hyderabad
- **Member of Alumni Cell, IIIT Hyderabad** | Sept'18 - May'20