

# RISHAV SINGH

VLSI Enthusiast eager to contribute to team success through hard work, attention to detail and excellent leadership skills. Clear understanding of FPGA, Linux and OS related technologies. Good grip over Data Structures and Algorithm Concepts. Motivated to learn and grow in the industry.



## CONTACT

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 +91 7016993938  
 @rishav-singh-0  
 Rishav Singh  
 Rishav's Blog

## SKILLS

### Programming Languages

Python  
C, C++  
Bash  
Assembly(8086)  
Dart

### Hardware Languages

Verilog HDL

### Technologies

Robot Operating System  
React  
Django  
Flutter  
Firebase

### Software & Tools

Scilab  
Ltspice  
8086 Microprocessor  
Keil µVision  
Proteus, Multisim  
Docker  
Git

### Operating Systems



Ubuntu, Arch Linux  
Windows

### CAD Tools

Quartus  
Modelsim  
Vivado

## EDUCATION

B.Tech in Electronics and  
Communication Engineering  
CGPA - 8.65/10



 July 2019 - May 2023  
 Dharmsinh Desai University  
Nadiad

PCM with Computer Science  
PR - 80.9/100

 June 2019  
 Shree P. V. Modi School, Jamnagar



## PROFESSIONAL EXPERIENCE

Intern at eYantra, IIT Bombay

 May 2021 - Jul 2021  
 Bombay



- Optimized auto evaluation tool for working on Linux kernels
- Created and connected Django backend with Vue frontend and automated dynamic docker container generation on submission and result evaluation.

Tech Lead at Abhiyanta

 Sep 2020 - Current  
 Nadiad

- Managed team performance by training, mentoring, disciplining and motivating innovators.
- Instructor for explaining the concepts of Robotics, Robot Operating Systems, Linux, Git and Embedded Systems. Working on application based projects.



Associate Developer at DDU Connect


 May 2019 - Current  
 Nadiad

- Worked with a team of developers for DDU Connect's official website and Android Application.



## PROJECTS


Vitarana Drone

 Oct 2020 - Feb 2021  
 [link](#)



-  Technology: Python, ROS, Drone, Gazebo, Git
- Used Robot Operating System(ROS) for Autonomous Drone based delivery system in a simulated Gazebo environment.
- Learned about team management and task division and distribution for achieving larger goals


Industrial Surveillance Robot on FPGA

 Jan 2022 - Mar 2022  
 [link](#)



-  Technology: Verilog, FPGA, Quartus
- A FPGA based robot simulation for measuring the important industrial parameters using different sensors
- Armed with IoT gate way to analyze the required parameters


IoT in Hydroponics

 Apr 2022 - Jun 2022  
 [link](#)

-  Technology: C++, Flutter, Firebase
- A government granted project to modify hydroponics based farming system with IoT in order to improve quality of soil less farming.
- Connected the hydroponics plant to the cloud server for data storage and control through flutter android app

Linux Kernel Configuration

 Jun 2021 - Jul 2021  
 [link](#)

-  Technology: OS Components, Linux, Kernel
- Configured Linux kernel for better power consumption, security and performance

## ACHIEVEMENTS

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- **Led** the team to reach till pre-finals round in eYantra Robotics Competition and were in **top 20** among **2603 teams of 572 colleges** all over the globe
- Grade B in Embedded Mooc
- Campus Ambassador at eYantra, IIT Bombay

## COURSES



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- VLSI SoC Design using Verilog HDL - Maven Silicon
- Embedded Systems and Robotics Mooc
- Practical Linux for Network Engineers

## OTHER PROJECTS

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### Abhiyanta Community Website

 Jul 2020 - Oct 2020  
 [link](#)

 Technology: React, Git, Github, Firebase, CI/CD

- Learnt to host the website on firebase
- Used github for automation and continuous deployment



### Personal Website using bash and markdown


 Mar 2021 - Apr 2021  
 [link](#)

 Technology: Bash, Markdown, Git, Github, CI/CD

- Achieved the goal of a minimal static site generator using bash and markdown files
- Automated CI/CD with github actions and hosted on github-pages


### Crypto and Stocks Analysing Bot


 Oct 2021 - Nov 2021  
 [link](#)

 Technology: Django, Redis, Docker, TALib

- Realtime data fetching and applying technical indicators on selected symbols
- Backtesting of custom strategies and displaying result on charts

### Jellyfin Media Server using raspberry-pi3

 July 2022 - Aug 2022

 Technology: RasperryPi

## EXTRA-CURRICULAR ACTIVITIES

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- Technical blog and documentation writing
- Tweaking linux desktop environments