



AYAN BISWAS

Third year engineering undergraduate , Jadavpur University, India

 ayanbiswas.in

 [linkedin.com/in/ayanbiswas0412](https://www.linkedin.com/in/ayanbiswas0412)  github.com/ayan-biswas0412

Academic Background

Jadavpur University

Bachelor of Engineering - Electronics and Telecommunication, CGPA (linear): 9.30/10

August 2019 - June 2023 (Expected)

Kolkata, India

Pathfinder Higher Secondary Public School, Jodhpur Park

Intermediate/+2; Percentage: 83.6

2017-2019

Kolkata, India

Bhatpara Amarkrishna Pathsala (H.S.)

Matriculation; Percentage: 93.5

24 Parganas (N), WB, India

2011-2017

Experience

CircuitVerse | more details

Core team - maintainer (Part-time)

Remote

Sept 2021 - Present

- Maintainer of the open sourced digital circuit simulator software CircuitVerse
- Responsible for ensuring zero downtime of CircuitVerse platform, having a total of 1 billion active users per day.
- Managing the community of 0.5k active programmers worldwide.

Google Summer of Code 2021 | see project

Student developer at CircuitVerse (Full-time)

Remote

May 2021 - Aug 2021

- Integrated different Learning Management Systems (like Moodle/Canvas/Sakai etc) with CircuitVerse platform.
- Developed a novel approach to streamline Learning Tools Interoperability protocol with the existing Ruby on Rails codebase of CircuitVerse
- 15 % increase in the user retention : Existing circuit simulator made more convenient for the teachers and students, and an interactive documentation has also developed

Skills Summary

Languages : C, C++, JavaScript, Ruby, Java, Verilog

Software Frameworks and Tools : Mobile App development (React-Native, Flutter, Java and Android Studio), Web app development (MERN stack, Ruby on Rails), Desktop app Development (ElectronJS), Google Dialogflow, DiscordJS

Proficient in : HTML5, CSS3, Ajax, JSON, JQuery, error reporting and load balancing in apps, caching, page indexing, push notifications, WordPress

Hardware knowledge : IC Designing, High Frequency Circuit Analysis, usage of diodes, BJT, MOSFET, Op-Amps, Digital circuit design (asynchronous and synchronous circuits), Multisim, CircuitMaker 2000

Other Skills : Data analysis using MS Office Tools, Working with Github, Video editing (screen capturing and editing in Final Cut Pro), Report writing (L^AT_EX, markdown, Jekyll)

Projects

JonoGunti - A people monitoring system | see on Github | Image processing, CCTV Image analysis

- A standalone openCV based standalone python application which can count the number of people and detect the face-mask usage in a given area and generate report.
- Validated the module for usage with CCTV camera and IP Camera.
- Deployment ready solution for cloud and remote management.

CovBot - a covid situation helper chat-bot | see on Github | NLP, REST API, Discord Integration

- Developed an automatic bot using Python to notify open slots of vaccination at nearest hospitals in an area.
- Made on DiscordJS framework using official CoWin API.
- A wide range of features like CoVID-19 news updates, Bed availability in hospitals etc. are also added.

Dailyiciousdabba - Food delivery app (Android/IOS) for home cooks | React Native, GCP

- A map based cross-platform food delivery app for home chefs, who can't afford to maintain a full fledged restaurant.
- Capable of processing of 5k active orders at a time.
- Efficient algorithm designed for allotment of delivery agents to the orders to reduce wait times per order.

Anusiksha - An interactive game to learn Sanskrit | see on Github | **GoDot game engine, GDScript, Python**

- Collaborated in the interactive game with a goal to teach the rich and vast language Sanskrit to the community.
- Developed on GoDot game engine, GDScript is used for game flow design.
- Final level runner up at Hackathon organized by IIT Roorkee.

Relevant Coursework

- Computer Programming
- Data Structures
- Analog Electronics
- Digital Electronics
- Signals and Systems
- Semiconductor Materials

Honors and Awards

- Selected as a student participant in Google Summer of Code 2021 from a pool of 5000 students worldwide - May, 2021
- **Mobile (Android/IOS) application** prototype **Quarantine Monitoring System - QMonitor** featured at **National Innovation Contest 2020**, organized by MHRD, Govt of India - Nov, 2020
- Awarded Dr. B.R. Ambedkar Scholarship for outstanding result in matriculation examination - May, 2017

Activities / Responsibilities in Academic Institution

IEEE Jadavpur University student branch

Webmaster

- Maintaining the web infrastructure for IEEE Jadavpur University student branch

June 2021 - Present

Jadavpur University