# G. ASWIN

#### WORK EXPERIENCE

# AirProbe (Dronebase.com) | Software Development Intern (Backend)

Mar 2022 - Present

- Facilitated a complete overhaul of the testing architecture by removing the need of populating database assets, resulting in a significant performance boost while running tests for applications.
- Wrote PyTests for various existing routes with the help of Postman and fixed bugs.
- Organized, cleaned and analysed application data consisting of multiple large data files, using Pandas.

#### **EDUCATION**

#### RNS Institute of Technology, Bangalore

Aug 2019 – Jun 2023

B.E. in Computer Science and Engineering

CGPA: 9.26/10

Kendriya Vidyalaya No. 2 Salt Lake, Kolkata

Apr 2018 - Mar 2019

Senior Secondary, CBSE

Marks: 91.2%

#### **PROJECTS**

## **I-Did-This-Today** | A web application built using Flask **□**

(Aug 2021)

- Used Flask on the backend, and frontend design made from scratch using HTML, CSS, JS & Bootstrap.
- The app uses Google OAuth authentication, and is deployed in Heroku (i-did-this-today.herokuapp.com).
- All data is stored in a Heroku PostgreSQL server.

# **LanJudge** | An online judge for evaluating programs **☑**

(Ongoing)

- A web app which uses Go for backend.
- Users submit their code and select a language, and LanJudge will execute that code for test inputs and prints the output.
- The code execution engine is written completely in C, with many UNIX API functions like execl and fork to create and run
  the user input programs as processes.

#### **Bored** | A native Android application **☑**

(Sep 2020)

- My final project for CS50X by Harvard, built using Java in Android Studio.
- Internally uses an SQLite database and API calls to BoredAPI. The UI/UX follows Google's Material Design guidelines.
- This app suggests us fun/productive activities that we can do when we feel bored.

#### Simulating a Deterministic Finite Automata in ARM7 Machine Code

(Jul 2021)

- Software simulation of any Deterministic Finite Machine using ARM programming to simulate the machine's output.
- The instructions were written in ARM assembly language for ARM7 (Big Endian) architecture in Keil UVision4 IDE.

## 

(May 2021)

- A menu driven program written in C which uses concepts of graph theory, file handling and graph algorithms.

# "Data Warehousing: The seed of data science" | A survey paper 🗹

(May 2021)

Studied data warehousing and how they have evolved by analysing the patterns and trends from 10 sources.

#### **RELEVANT COURSEWORK**

NPTEL Certification: Design and Engineering of Computer Systems (A course on Distributed Computing by IIT Bombay)

**B.Tech Courses:** Data Structures & Algorithms, Database Management Systems, Computer Organization, Operating Systems, Compiler Design, Computer Networks

#### **TECHNICAL SKILLS**

Languages: Python, Go, C, C++, Bash, Java, SQL, HTML, CSS

Technologies / Frameworks: Git, Flask, Android, Selenium, PostgreSQL, SQLite, ARM, Heroku, Chart.js, Postman

#### **ACHIEVEMENTS / EXTRACURRICULAR**

- Conducted and co-presented a workshop on GitHub for juniors as part of a student club (BigO) 🗗
- 3<sup>rd</sup> Position out of 300+ participants in State Level (Karnataka) C programming contest ✓
- Placed 2<sup>nd</sup> out of 200+ participants in Codeflix hosted by Google Developer Students Club RNSIT
- Facilitated & co-authored on problems for college-level programming contests (Google Developer Students Club RNSIT)