

## EDUCATION

Chennai, India

VIT University

July 2018 - Present

- **Major:** B Tech Computer Science and Engineering **CGPA: 8.72**
- **Programming Coursework:** OOPS, Data Structures and Algorithms, Database Management System, Operating System, Networks and Communication, Internet and Web Programming, Software Engineering, Natural Language Processing

## EXPERIENCE

Scilab Toolbox Development

FOSSEE club of VITCC &amp; IIT Bombay

April 2020 - June 2020

**OpenMP Toolbox (Hackathon Finalist - Top 12)** (<https://github.com/VIT-Scilab/SciMP.git>)

- Developed a toolbox that integrates the OpenMP library in Scilab.
- A total of 31 OpenMP functions were implemented which includes various region control, environment execution, timing routines and lock functions. Pushed to Atoms.

**Operating System Toolbox** ([https://github.com/VIT-Scilab/OS\\_Toolbox.git](https://github.com/VIT-Scilab/OS_Toolbox.git))

- Developed a toolbox that allows the implementation of various Operating System functions in Scilab.
- A total of 20 Operating System functions were implemented which includes various scheduling, memory allocation, resource allocation and deadlock avoidance algorithms. Pushed to Atoms.

## PROJECTS

**Sustainable Agriculture** (<https://github.com/AravindKrishnaR/Sustainable-Agriculture.git>)

- Developed a one stop website that utilizes various Machine Learning concepts and algorithms to implement 4 modules namely Crop recommendation, Fertilizer recommendation, Yield prediction and Disease detection.
- Simulated an IoT based Smart farm system using Node-RED that automates the process of obtaining soil nutrients(NPK values) and pH values.
- The temperature, rainfall and humidity values have been automated using API calls on the basis of the location input.
- Utilized Google Colab, Python, Node-RED, HTML, JavaScript, Bootstrap.

**Online Quiz Portal** (<https://github.com/AravindKrishnaR/Online-Quiz.git>)

- Developed an online quiz portal that lets the teacher or admin create a quiz and post relevant questions and lets the student to attempt the quiz and assess themselves after the quiz using a fully automated system.
- Implemented the above system using the DAO design pattern.
- Utilized HTML, CSS, JSP, Java and MySQL with Apache Tomcat as the server.

**Movie Review Classification** (<https://github.com/AravindKrishnaR/Movie-Review-Classification.git>)

- Developed and trained a model for sentiment analysis that classifies as good or bad based on the reviews received by it using text classification techniques.
- The movie review dataset was cleaned and preprocessed and 3 different feature extraction techniques(top-N words, bag-of-words, unigrams and bigrams) were used to combine the reviews into features. Naive Bayes classifier was then used to perform the classification.
- Utilized Google Colab, Python, NLTK.

**Timetable Generator Webapp** (<https://github.com/AravindKrishnaR/Timetable-Generator.git>)

- Developed a webapp which automates the process of timetable generation, which in turn solves the problem of clash in timings during allocation of slots.
- Utilized HTML, CSS, JavaScript, PHP, phpMyAdmin and Xampp.

**Maze Generation and Solving Game** (<https://github.com/AravindKrishnaR/Maze-Generation-and-Solving.git>)

- Developed a maze game which can be solved by the user using the concepts of stack and backtracking.
- Utilized C++.

## Languages and Technologies

**Proficient:** C, C++, Python, Java, HTML, JS, MySQL, JSP, Git **Familiar:** Bootstrap, PHP, Latex, MATLAB, R, Scilab