West Bengal, India
+91 9382615195
pradhanranit0019@gmail.com
RanitPradhan.github.io
ranit-pradhan

Ranit Pradhan

OBJECTIVE

Looking for a position in the field of Embedded Systems and Hardware security development where I can utilize my skills to work towards personal and professional development and contribute towards the prosperity of the organization. I am highly motivated and eager to learn new things.

EDUCATION

2019-2023 Ongoing — **B.Tech in Electrical and Computer Engineering**, *Amrita Vishwa Vidyapeetham*, Kollam, Kerala, India.
CGPA: 8.12/10

2019 — **Belda Gangadhar Academy**, Paschim Medinipur, W.B., India.
Percentage: 78.93%

2017 — **Jankapur High School(H.S)**,), Paschim Medinipur, W.B., India.
Percentage: 86.14%

EXPERIENCE

November 2019 to January 2021 — **Member at IEEE, Kerala Section**, *Fresher, Amrita School of Engineering*.
I was an active IEEE member for one year in my college. As a fresher IEEE student, I had attended some conferences, webinars,online competitions and a one week ML internship.

December 2020 to Present — **Member at Team bi0s**, *Amrita School of Engineering*.
I have been an active member of the Open Source community of Software and Hardware security from 2nd year(2020) onwards. I actively take part in all events, contribute to projects, workshops and also help in organizing CTF(Capture The Flag) events hosted by bi0s.
Page link:
`https://bi0s.in/hardware.html`

TECHNICAL PROJECTS

October 2021 — **Vaccine Verification using RFID-based secure authentication.**.
The aim of the project was to use RFID technology in the fight against Covid-19. By following the process we can verify one is fully vaccinated with a good health or not, besides it we also tried to include contactless temperature verification.
Certificate Link:
`https://raw.githubusercontent.com/RanitPradhan/Certificates/main/IEEE_RFID_2021.png`

July 2020 — **An Ultra-Portable Vis-NIR Spectrometer with an Integrated Light Source for Chemometric Applications**.
This is a project for on-site material inspection and quality analysis of food and agricultural produce, which require portable sensing systems. A mini spectrometer is used for the measurements and the spectra data is analyzed using machine learning. My contribution in this project was to perform measurement of different compositions of medicinal pills and post-process the spectral data to prepare it for predictive model building.
Project Link:
`https://iopscience.iop.org/article/10.1149/1945-7111/abc7e8/pdf`

January 2020 — **AC to 12V DC Converter**.
The primary objective of this project was to glow a 12V LED strip using AC to DC converter.
Project Link:
`https://github.com/RanitPradhan/bi0s/tree/master/Projects/ac_to_dc_converter`

September 2020 **COVID-19 Alert Distance**.
This project is related to the current pandemic situation of COVID-19. A replica model to alert human to keep safe distance from each other.
Project Link:
`https://github.com/RanitPradhan/bi0s/tree/master/Projects/COVID-19_Alert_Distance`

COURSE PROJECTS

July 2020 **A survey on state-of-the-art light weight, low energy operating system and technologies for wearable devices**.
The primary objective of this project was to describe and explain about the light weight operating system, to know the characteristics, advantages and disadvantages of light weight OS. We concentrated on various kinds of Light weight, Low energy operating systems and their applications that are used in this era.
Project Link:
`https://github.com/RanitPradhan/docs/blob/main/Group_5_OS_Report.pdf`

COURSES AND MOOC

May 2020 **The Arduino Platform and C Programming**.
Issuing Organization: University of California,Irvine.
Certificate Link: `https://coursera.org/share/a6fdb8db507c58f7ae65a0ba2fb95eee`

April 2020 **Working with JSON Data)**.
Issuing Organization: University of California, San Diego.
Certificate Link: `https://raw.githubusercontent.com/RanitPradhan/Certificates/main/For_CV/JSON_data.JPG`

August 2020 **Data Visualization with Python**.
Issuing Organization: Real Python .
Certificate Link: `https://raw.githubusercontent.com/RanitPradhan/Certificates/main/For_CV/Data_Visualization.JPG`

July 2021 **The Complete Front-End Web Development Course.**.
Issuing Organization: Udemy .
Certificate Link: `https://www.udemy.com/certificate/UC-1d258d4e-9893-49b2-8f4f-c87f361bb1d8/`

VOLUNTEER

January 2015 **Science Exhibition Project-1**.
Contributed in a model explanation of an Automated railway alarming system if there is any fault on the train-line. Platinum Jubilee of Jankapur High School(H.S) [1940-2015]

December 2019 **Science Exhibition Project-2**.
Contributed in a model explanation of an Automated water level alarming system.Centenary of Belda Gangadhar Academy [1919-2019]

INTERNSHIPS AND CONFERENCE ATTENDED

January 2020 **Hacktoberfest 2019**.
Attended conference of Digital Ocean,an introduction to Git and GitHub. It is a two days workshop taken by amfoss student club every year.

October 2020 **Machine learning Internship, IEEE**.
An online internship based on Data Science and ML Certificate Link:
`https://raw.githubusercontent.com/RanitPradhan/Certificates/main/Certificate_Me.jpg`

ACHIEVEMENTS

- Got Paschim Banga Vigyan Mancha award in 2009 and 2017 for getting 5th position in our district and 2nd position in my block respectively..

Coursework

Core Courses IoT, Embedded Systems, Data Structure, Object Oriented Programming, Microcontrollers and Applications,Electric Machines

Lab Courses	Data Structure Lab, Object Oriented Programming Python Lab, Digital Manufacturing, Microcontroller and Architecture Lab.

LANGUAGES

English	Full Professional Proficiency
Hindi	Full Professional Proficiency
Bengali	Full Professional Proficiency
Odia	Full Communication Proficiency

COMPUTER SKILLS

OS	Windows, Linux
Programming Languages	Python, C, C++, Assembly, Matlab
VCS	Git
Other Skills	Arduino, AutoCAD, Problem Solving, Playing CTFs, Pneumatics

INTERESTS

Technical	Firmware, IoT, Embedded Systems, Robotics, Hardware, Artificial Intelligence, Machine Learning, Web Development, Contributing to Open Source
Hobbies	Travelling, Cricket

PERSONAL DETAILS

DOB	3rd August, 2000
Current Residence	Kollam, Kerala, India
Status	Student