

9345190256

vishwa05054@gmail.com

in <u>vishwa-s-b922b2242</u>

VishwaS554

wishwa-s/portfolio.io

#### AREA OF INTEREST

- RF & Microwave Engineering
- VLSI & IoT Design

#### **TECHNICAL SKILLS**

- Ansys HFSS
- MATLAB
- Xilinx ISE
- OriginLab

### **PROGRAMMING SKILLS**

- C
- Python
- Java
- SQL
- VHDL/Verilog

# **SOFT SKILLS**

- Problem Solving
- Leadership
- Communication

#### **LANGUAGES**

- English
- Japanese
- Tamil
- Hindi

# **VISHWAS**

As an ECE graduate, I specialize in the design, development, and optimization of radio frequency systems and components. My expertise spans a wide range of applications, from wireless communication networks and satellite systems to radar and IoT technologies. I have developed various projects related to RF and Communication Systems.

### **EDUCATION**

# M.Kumarasamy College of Engineering

- Bachelor of Engineering Electronics and Communication Engineering (2021 2025)
- CGPA: 7.45 (Till 7th semester)

## Pushpalata Matriculation Higher Secondary School

• HSC (June 2020 - March 2021)

• Grade: 90%

## Pushpalata Matriculation Higher Secondary School

• SSLC(June 2020 - March 2021)

• Grade: 90%

# **PROJECTS**

## ML based Non-Invasive Sugar Detection Kit

Role: Antenna Optimization and ML Implementation

Optimized the antenna design for real-time frequency applications, enhancing the accuracy and efficiency of the sugar level detection system. Applied machine learning algorithms to improve detection accuracy and ensure more reliable results. Integrated the system with a web application to provide users with a seamless and interactive interface. This project was developed as part of my Final Year Project.

# Rapid Detection of Virus using Microstrip Bio-Sensor

Role: Designing of Antenna

Designed the microstrip antenna for effective virus detection using the bio-sensor. Developed a real-time 3D model to enhance the efficiency of virus detection and analysis. Optimized the antenna design for real-time frequency applications to ensure accurate and timely results.

### **PUBLICATIONS**

- Jeyakumar, P., Vishwa, S., Prakash, V., Dinesh, P., Rajesh Ram, P., & Muthuchidambaranathan, P. (2023). Long-short term memory based wideband beam tracking scheme for massive mimo systems. Wireless Networks, 1-10. (SCI Published)
- Jeyakumar, P., Vishwa, S., & Yuvaprabha, P. (2023). Non-Invasive Glucose Monitoring Using PCA-Enhanced QuadRing Resonator Sensor. Applied Physics A. (SCI publication Accepted)

### **PATENTS**

- Jeyakumar P., Jegadeesan S., Sachin Aravinth K., Vishwa S., Gokul SC., Shanjay RK. "A
   Portable Test Kit For Virus Detection Using Micro Strip Cavity Resonator Biosensor" Intellectual
   Property Republic of South Africa Journal, Design No. 2023/06780 dated February 28, 2024.
   (Granted)
- Jeyakumar P., Jegadeesan S., Vishwa S., Subash P., Shanjay RK., Sivaramakrishnan M. "A
  System of Acoustic Metamaterial-Based Hearing Aid for Tackling Tinnitus and Urban Noise
  Mitigation" Intellectual Property Germany Journal, Design No. 2023/06780 dated February 28,
  2024. (Granted)
- Jeyakumar P., Jegadeesan S., Vishwa S., Subash P., Sanjai B., Pradeep V., Shanjay RK., Sivaramakrishnan M., Subash S. "A System for Preserving Tomatoes using Evapourative Cooling" Intellectual Property India Journal, October 02, 2024, IPC No. H04R 25/00 dated August 10, 2024. (Published)
- Jeyakumar P., Jegadeesan S., Vishwa S., Subash P., Pradeep V., Subash S. "A System for Organ Storage and a Method Thereof" Intellectual Property India Journal, October 27, 2023, App No. 202341068512 dated October 12, 2023. (Published)
- Jeyakumar P., Jegadeesan S., Kamalesh S., Jagadeeshan V., Sanjai B., Vishwa S., Yuvaprabha B., Nikesh S., Subash P. "Hazardous Gas Detection Kit Using Rf Communication For Sewage Workers" Intellectual Property India Journal, March 29, 2024, App No. 202441019013 dated March 15, 2024. (Published)
- Jeyakumar P., Jegadeesan S., Kamalesh S., Jagadeeshan V., Arulmozhi B., Vishwa S., Sanjeevadharsh B. "An Aerial Docking And Battery Swapping System For Vtol UAV" Intellectual Property India Journal, April 5, 2024, App No. 202441024380 dated March 27, 2024. (Published)

#### **AWARDS & ACHIEVEMENTS**

• Won First Prize for the project "Wireless Power Transfer system for Electric Vehicles" in Global Product Development Ideathon '23 conducted by SRM College of Engineering.

- Won First Prize for the project "High Efficiency miniaturized antenna for wireless biomedical telemetry in capsule endoscopy" in the category of "Best ANSYS Project" in the National level SRISHTI contest conducted by Saintgits College of Engineering, Kerala.
- First Runner up for the project "Wireless Power Transfer system for Electric Vehicles" in National-level Intelligent Innovators Hackathon hosted by Sri Eshwar College of Engineering.
- Best Student of the month (September 2023) at M.Kumarasamy College of Engineering.
- Runner-up for the project "Liver Preservation Kit" in the category of "Best Solidworks Project" in the National level SRISHTI contest conducted by Saintgits College of Engineering, Kerala.

### **INTERNSHIPS**

- Successfully completed Summer Internship with the outcome of SCI publication titled "Longshort term memory based wideband beam tracking scheme for massive mimo systems" at the National Institute of Technology (NIT), Trichy.
- Attending Internship at KSHIN Tech to work on Japanese related LIVE projects of Hybrid Mobile App (iOS & Android), Web Development.
- Completed the internship in TechnoHacks EduTech in the domain of Machine learning.
- Completed an internship as a Campus Ambassador at Internshala for 3 months during the year 2024.
- Completed an internship as a Campus Ambassador in Lyriclious Learn with us during the year 2022.

#### **CERTIFICATIONS**

- Completed AWS Developer Associate global certification with a score of 988 out of 1000.
- Successfully completed the Japanese-Language Proficiency Test (N3) and NAT Q3.
- Completed STEP certification with a grade of 8.
- Completed a course on "Earth Observation for Climate Action" given by ISRO (Indian Space Research Organisation)
- Completed 20+ certification on Coursera.
- Completed 30+ certification on Udemy.
- Completed 30+ badges on Google Cloud.
- Completed NPTEL certification on "The Joy of Computing Python" with a score of 85.
- Completed **NPTEL** certification on "**Introduction to Internet of Things**" with a score of 85.

# **CO-CURRICULAR ACTIVITIES**

- Attended the workshop on "Basics of VLSI Design" at IIT Palakad.
- Presented a project "Rapid Detection of Virus using Microstrip Bio-Sensor" at Bannari Institute of Technology.
- Presented a project "Smart Aquaculture Monitoring System" at K. Ramakrishna College of Engineering.
- Presented a paper on "Prolonged Preservation of Tomatoes Using the Evaporative Cooling Method" at Kings Engineering College.
- Attended workshop on Ansys Hfss conducted by Vellore Institute of Technology.
- Won Frist Prize in Quiz competition conducted by K.Ramakrishna College of Engineering.
- 2nd Runner up at District level Kho Kho Match.

## **EXTRA CURRICULAR ACTIVITIES**

- A member of the Startup club.
- Treasure of IETE association of ECE Department.

## **PERSONAL INFORMATION**

• Father's Name : Shunmuga Sundaram

• Date Of Birth : 05.05.2004

• Address for Communication : A-108, 14th Cross Street, Tirunelveli, Tamil Nadu, 627007.

### **DECLARATION**

I here by declare that, the details and the information furnished are correct to the best of my belief and knowledge.

Date:	Signature
Place:	(Vishwa S)