Name and Qualification	Contact
PUNITH AJ MTech Digital Communication Engineering R V College of Engineering, Bangalore	Email: punithaj.ldc19@rvce.edu.in Email: Punith1097@gmail.com Phone: 7815815464

Profile	
Objective	To succeed in an environment of growth and excellence and earn a job which provides me a job satisfaction and help me to achieve personal as well as organizational goals.

Exam/Degree	Institution	Board/University	Percentage/CGPA	Year
M.Tech Digital Communication Engineering	R V College of Engineering, Bangalore	Visvesvaraya Technological University	8.05	2021
B.E. Electronics and Communication Engineering	NIE Institute of Technology, Mysore	Visvesvaraya Technological University	5.79	2019
PUC	Sadvidya semi-residential PU college,Mysore	Department of Pre-University Education	83.5%	2015
SSLC	Ideal Jawa Rotary high school,Mysore	KSEEB , Bangalore	84.48%	2013

Technical Skills and Non-Technical Skills		
Python programming	Basics of Antenna designing	Team Player
Web Development using Django	Cisco routing and switching	Quick Learner and Hardworking
Basics of html programming	Machine Learning, Deep learning	Problem Solving Skills
CSS, Bootstrap, JavaScript, MySQL	Computer Vision, NLP	Curious to gain Knowledge

GitHub Repositories	
https://github.com/Punith1997/foodOnline	Multivendor Restaurant
https://github.com/Punith1997/AJ-Polls-Project	Sports poll website
https://github.com/Punith1997/greatkart-django-1	Ecommerce website
https://github.com/Punith1997/Landcover_Unet	Landcover U-net

Projects		
"Heterogeneous clustering algorithm in sensor networks:"	***"Vivaldi Antenna design using CST software tool"***	***"Pick and Place Robot project using Arduino Uno"***
Developed a sensor network and implemented 3 different types of clustering algorithms like, HLEACH, MLEACH, MNEAP using Python and matplotlib library was used to represent them graphically. The performance of each protocol was analyzed against the total energy consumption and number of operational nodes. The algorithm with least energy consumption and more operational nodes was selected. LOS routing algorithm was implemented to the selected protocol for route establishment between source and destination for data transmission. A key matching mechanism was developed in order to prevent the enter of malicious nodes into cluster.	With the help of CST software tool, I designed a Vivaldi antenna that was having good directivity up to 6dB and frequency range between 1Ghz to 6Ghz. Suitable metamaterial is used to enhance the directivity characteristics.	The robot is connected to the smartphone via Bluetooth (HC-05 Module) which was having max of 10- meter connection range and takes command from that. Each time when we touch the button on the screen of the phone, robot activates in action. Servo motors were used for the movement of robot arms and wheels.

Projects

"Designing Campus network using Cisco Packet Tracer:"	*"Performance analysis of Machine Learning algorithms on WSN under Flooding, Gray-Hole, Black-Hole and TDMA attacks"*,	*"Ecommerce website using Django"*,
With the help of cisco packet tracer, I design the wired network to a campus, through various componentslike switch, router, server etc., and configured them. Access lists were used to filter the IP addresses in order to give permission or reject the permission to make the communication. Telnet was used to test the connection and find out if there is any bug in connection.	The aim of the project is to analyze the performances of various Machine Learning algorithms (Random Forest, Decision Tree, KNN, SVM, Logistic Regression) for detection of the attack type (Flooding, Gray-Hole, Black-Hole, TDMA) on WSN dataset. The accuracy of each model is observed and compared with each other. Random Forest algorithm outshined all other algorithms with 99.76% accuracy.	Developed an E-commerce website using Python, Django, HTML, CSS, Bootstrap and JavaScript. In this project user can add the items in his cart and if user wants to check out the cart items, then sign in required. After the completion of registration, account is activated through activation link that is sent to user's registered email address. One can edit their profile whenever they want. PayPal payment gateway is provided in order to complete the online payment. User data are stored in a sqlite3 database.

"Semantic segmentation of Mitochondria using U-net architecture"	*"Mapping of Landcover arial Imagery dataset using U-net with Resnet34 as backbone"*
A tiff image dataset of 165 images with high resolution are splitted into patches of 256*256 size of 3200 images using patchify module. These images dataset is now trained with the autoencoder for 100 epochs, and the weights of the encoder part is stored. Now the U-net architecture is built for training, the stored weights of the encoder is now transferred to the encoder part of the U-net. The data is now trained for 150 epochs. Model evaluation is done using Intersection over union (IOU), and 93% score is obtained.	A very high definition arial images are splitted into 256*256 sizes of 41646 images using Patchify module. The images are preprocessed in order to train and test them. Now a U-net architecture with Resnet34 as a backbone is created for training purpose using "segmentation_models" module. The dataset is trained for 100 epochs using the architecture with batch size of 16. Model is evaluated using Intersection over union (IOU), and 87% score is obtained.

Internship Experience

Ineuron.ai NOV 2021-Present	Currently doing Internship and certification on Full Stack Data Science Program.
Exposys Datalabs JUN 2020 – JUL 2020	Completed internship as a web developer, and built a Sports poll website application.

Personal Information

DOB	29/10/1997	**Languages**	Kannada, English
Father	AB Jayaramu	**Mother**	Hemalatha BR
Hobbies: Listening music, Watching Movies and Browsing.		**Address:** Dn-304, first floor,19th main,3rd cross, KD Circle, Vijayanagara 2nd stage, Mysore-570017	