# KARTHIK P BILICHOD

H.No-605, 17th main, 10th cross Padmanabhanagar Bengaluru - 560070 Karnataka



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## **OBJECTIVE**

I am interested to work in the field of Embedded systems, Robotics(especially aerial robotics), RF and Antennas. I will definitely work hard and give my best to solve problems which will help the society.

## **EDUCATION**

Course	Discipline	Institution	Year of passing	Score
School	Class-10th CBSE	Kendriya Vidyalaya Hospet	2014	9.6 CGPA
Pre University	Class-12th CBSE	Sharada Vidyaniketana	2016	92.25(PCMB)
		Public School		Percent
		Mangaluru		
B.Tech	Electronics and	PES University	2020	8.3 CGPA
	Communication	Bengaluru		Sem 1 to Sem 5
	Engineering			

#### **PROJECTS**

- 1. Ball catching Robot during Summer internship at Microsoft Innovation Lab PES University under the guidance of Dr. Venkatarangan MJ and Prof Rajasekar M. Used Firebird-V platform for catching and OpenCV for trajectory prediction.
- 2. **Self balancing Robot** using PID control as a mini project for the course Introduction to Robotics under the guidance of Dr. Venkatrangan MJ.
- 3. Faster computation of **Inverse of huge matrices** using recurrent neural networks as a mini project for course Machine Learning under the guidance of Dr.Koshy K George. (In progress)
- 4. **Determination of array factor for Superdirective characterstics** as a research project under the guidance of Dr.Saumva Adhikari.
- 5. A **Drone** for Defence applications as a hobby project. (In progress)
- 6. Establishing fast communication between multiple ESP32 modules using **WiFi Direct** (without internet) under the guidance of Dr.Manikandan J at CORI, PES University.
- 7. Sun tracking solar panel using AT89C51 microcontroller and LDRs as a mini project for the course Microcontrollers.
- 8. **Cell Phone Detector** using LM358 Dual OpAmp as a mini project for the course Linear Integrated Circuits.
- 9. Fruit Plucking Robot for JED-I(Joy of Engineering and design) lab using Arduino Uno and image processing using OpenCV.

## TRAINING AND INTERNSHIPS

- PNM Satellite Design course held at PES University by Prof. Sharan Asundi from Tuskegee University.
- Compu music course to produce and compose music using software Chuck.
- IoT workshop held at PES University by i3indya technologies.
- Interned at **CORI**( Crucible for Research and Innovation), PES University.
- Interned at Microsoft Innovation Lab, PES University.

#### RESEARCH PUBLICATIONS

1. To synthesize an Array Factor for Superdirective chracteristics of a broadside Antenna. Have successfully completed and finalized the array factor and the work is about to be published. It is being done under the guidance of Dr.Saumya Adhikari.

#### TECHNICAL SKILLS

## • Programming languages:

C, C++, Python, Matlab.

#### • Software worked with:

Atmel studio 6, Arduino IDE, Scilab, MATLAB, keiluvision 3, XCTU, Blender Animation.

#### • Hardware worked with:

Arduino Uno and NANO, Firebird V robot with ATmega 2560 microcontroller, Xbee Modules, ESP32 Wifi Module, Various sensor interfaces.

## • OS worked in:

Ubuntu, Microsoft Windows 7/8/10, XP

#### SOFT SKILLS

- 1. Hard working and Resilient.
- 2. Helping Nature.
- 3. Good leadership qualities.
- 4. Good in team work.
- 5. Languages spoken: Kannada, English, Hindi, Telugu.

## **EXTRA - CURRICULAR ACTIVITIES**

- Attended Foreign language courses. Opted and passed in German language course from PES University.
- Tabla and keyboard player.
- Basketball and Badminton player.
- Learning Sanskrit and reading ancient Indian texts in Sanskrit.

## CO - CURRICULAR ACTIVITIES

- 1. Attend many talks and guest lectures. Attended the talk of 2017 Nobel Laureate **Kip Thorne** at ICTS, Bangalore on 11th Jan 2018.
- 2. Participated and won third prize in college technical fest **Prakalpa**.
- 3. Participated in Eyantra Robotics Competition 2017 and 2018. Certificate of completion in 2017 and finalists in 2018.
- 4. Have done Mini projects based on regular courses to understand practical aspects of course work.

#### PERSONAL DETAILS

Father's Name : B S Prasanna Mother's Name : B Srusti

Sex : Male

Date of Birth: 28th January 1999

Nationality: Indian

## REFERENCE

• Dr.Saumya Adhikari

Professor, Electronics and Communication Department

PES University, Bengaluru

Email ID: saumya.adhikari@pes.edu

• Dr.Venkatarangan MJ

Professor, Electrical and Electronics Department

PES University, Bengaluru

Email ID: venkataranganmj@pes.edu

• Prof Rajasekar M

Associate Professor, Electronics and Communication Department

PES University, Bengaluru

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#### **DECLARATION**

I hereby declare that above-mentioned information is correct to the best of my knowledge and belief.

Date: 15th April 2019