**DEVI PRIYA M**

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| **CAREER OBJECTIVE** |
| To succeed in an environment of growth and excellence and create a career which provides me job satisfaction and self-development and help me achieve personal as well as organisational goals. |

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| **EMPLOYMENT & EDUCATION:** |
| * **JUNIOR RESEARCH FELLOW(2021-2023)**   **Location finding and human machine interface software department**  Defence Research and Developmental Organisation-chandrayanagutta,  Hyderabad   * **Master of Technology in Embedded Systems Design (2015 - 2018)**   VNR VJIET, Bachupally  Deemed to be University   * 1. CGPA * **Bachelor of Technology in Electronics and Communication Engineering (2011 - 2015)**   TRR College of Engineering, Patancheru  JNTU Hyderabad  82.92%   * **12th Science (PCMB) from CBSE Board (2009 - 2011)**   Kendriya Vidyalaya, GITB Siddhartha Nagar  Mysore  78.8%   * **10th from CBSE Board (2008 – 2009)**   Kendriya Vidyalaya, Gachibowli  Hyderabad  89.8% |

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| **TECHNICAL SKILLS JRF :** | |
| **Skill Set and Tools** | Programming Languages: C, Embedded C, Python,Tkinter, GUI development, Data processing  Microcontrollers and Peripherals: 8051, MPU6050 (Accelerometer and Gyroscope),Radar detection and emitter  SOC: Raspberry Pi.  Networking tool: Putty, WinSCP, Pushbullet, Logentries |
| **Operating System** | Windows, Raspbian OS |
| **Application Software** | MS Office (Word, Excel, PowerPoint) |

Work Experience as JRF

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| **LF and HMI Software Division Sep*’21 – Oct’23*** | |
| Software coding for real time applications for Electronic Support Missions | |
| **Description** | Development of GUI for emitter localization with Azimuth and elevation measurements using a single aerial platform. |
| **Hardware** | PC |
| **Software** | Python,matplolib,numpy,tkinter,scipy,pandas,scikitlearn, data analysis,real time kalman filtering |
| **Tools** | Spyder IDE |

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| **Responsibilities** |
| * Inclusion as software development member in one of the prestigious projects of DRDO. * To define objective and do literature survey for screening research papers aligning with the goals of the project. * Write python code for entire application for various user input scenarios * Create user friendly GUI for real time scenarios and and do dummy trajectory generation with noise inclusion. * Proceed with data cleansing ,kalman filtering,emitter localisation and trajectory reconstruction * To analyze and validate the system performance in real time. * As the Project Lead, Taking care of all the Inventory belonging to the fulfilment of the project. |

Academic Project Summary

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| **Major Project *April’17 – Nov’18*** | |
| **Implementation of Ambient Assisted Living System using Raspberry Pi with IoT** | |
| **Description** | Development of wrist wearable sensor based hand gesture recognition device. Using of IoT provides data logging and real time message alerts on caretaker’s smartphone based on the gesture performed by older person. |
| **Hardware** | Raspberry Pi, MPU6050 |
| **Software** | Embedded C, Python, Linux, Pushbullet API, Logentries cloud based services |
| **Tools** | WinSCP, Putty, Xming server |

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| **Responsibilities** |
| * To design and develop a reliable wireless wearable gesture recognition device for monitoring and assisting task. * Research and Literature survey for developing a standalone real time application helpful for the society. * Being the project Lead encountering and solving real time errors and issues. * To develop a hand gesture acquisition device for real time usage. * To train AGRD (Assistive Gesture Recognition Device). * To develop gesture recognition algorithm for real time recognition. * Framework development to send gesture related information in the form of text and voice message and also to the cloud for real time logging. * To analyze and validate the system performance in real time. * As the Project Lead, Taking care of all the Inventory belonging to the fulfilment of the project. |

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| **Minor Project *Mar’16 – Nov’17*** | |
| **Analysis of Inertial Sensor Based Pen data Using Gesture Recognition Algorithm** | |
| **Description** | Development of a real time gesture movement capture using inertial sensor based pen. Gesture recognition of data using preprocessing, feature extraction and classification algorithms. Display the recognized gesture remotely on PC screen. |
| **Hardware** | Arduino Uno, MPU6050, ZigBee modules |
| **Software** | Embedded C |
| **Tools** | Arduino IDE, MATLAB |

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| **Responsibilities** |
| * Developing the Pen design based on the Requirement. * Enabling wireless transmission and reception of data via ZigBee modules. * Capturing of gesture data for analysis. * Code for gesture capturing and recognition on Arduino IDE. * Loading and working with data on MATLAB. * Pre-processing, Feature Extraction and Gesture Recognition using different algorithms. * Validating the results and selecting best algorithm for the pen based device. |

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| **Achievements** |
| * Worked as junior research fellow for two years in defence organisation * M. Tech major project selected for IEEE 2018 International Conference and will be published in the IEEE Digital Library * Received two years of Prime minister funded scholarship (B. Tech 3rd and 4th year) * Topped E.C.E branch in B. Tech and college 3rd topper. |

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| **Interests** |
| * Learning Korean and driving |

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| **Extra-Curricular activities** |
| * Presented paper on Major project at IEEE 2018 International conference held at Bhubaneswar. * Attended workshops on MATLAB * Involved in various activities held at school and college level   Sports, Skits, Dance performances |

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| **Personal Details :** | |
| **Date of Birth** | 17th March 1994 |
| **Languages** | English, Telugu, Hindi and kannada |

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| **Declaration:** |
| I hereby declare that above mentioned information is correct up to my knowledge and I bear the responsibility for the correctness. |

**DEVI PRIYA M**