# Varsha L. Thirumalai

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#### **OBJECTIVE**

To apply my skills in embedded systems, networking, the internet of things and artificial intelligence (AI) to make technological driven products available to all sections of society.

#### **EDUCATION**

**Graduate Degree** 

Masters of Science in Electrical Engineering

Aug 2022- May 2024

San Jose State University

Courses: Advanced Computer Architecture, Reinforcement Learning for Multi-Robot Networks,

Probability, Random Variables and Stochastic Processes.

**Undergraduate Degree** 

Bachelor of Engineering in Electronics and Communication

Aug 2015 - July 2019

PES University, South Campus (Affiliated to Visvesvaraya Technological University CGPA: 7.52/10 (~ 3.02)

#### **EXPERIENCE**

Project Engineer, Wipro technologies, Bangalore, India

Aug 2019 – May 2022

(Automobile feature validation scripting, Python, C, OOPs, Unit & Integration, Regression Testing, API design, Test Automation, Agile)

Module script automation tests using Python and API development using Python in C for car infotainment system, control, navigation modules.

### **SKILLS**

Programming: C, Python

Hardware: 8086, LPC1768 Arm Cortex M3, Arduino, Raspberry Pi.

Software Tools: MATLAB, Processing, Vivado Xilinx, Cadence: Analog and Digital Design

#### PROJECTS AND CERTIFICATIONS

Final Year Project "Vend Tech": Vending Machine (Embedded C, IoT, Arm Cortex Microcontroller, RFID)

2019

This vending machine was designed to sell small items such as snacks and Engineering lab equipment that students frequently use. We used an Arm Cortex Microcontroller programmed in embedded C. We also replicated the RFID card transaction system and improved the machine's design by incorporating a mechanical-multiplexer that was less expensive and used less power.

Codes and Pictures: <a href="https://github.com/vthiru300/vending\_machine\_project">https://github.com/vthiru300/vending\_machine\_project</a>
<a href="Mechanical mux design: https://www.thingiverse.com/thing:3154074">https://www.thingiverse.com/thing:3154074</a>

Certified For Deep Neural Networks by Andrew Ng

https://www.coursera.org/account/accomplishments/verify/MHDPNR9CGEYN

2018

## **ACHIEVEMENTS AND LEADERSHIP ROLES**

Kludge 2k18 The Electronics Design Contest – PES University, Bangalore

March 2018

Mentor: Mentored the students who took part in the contest. Gave a seminar on Drone development.

WiDs (Women in Data Science) Datathon - Kaggle

February 2019

Won 9th place and a cash prize at the Indian Institute of Management in Bangalore. The WiDs Datathon 2019 is the result of a collaboration between Stanford's Global WiDs team, the West Big Data Innovation Hub, and the WiDs Datathon Committee. The task at hand was to develop a model that predicts the presence of oil palm plantations in satellite imagery.

**Leaderboard:** https://www.kaggle.com/c/widsdatathon2019/leaderboard

Code: <a href="https://www.kaggle.com/varsha300/fastai-starter">https://www.kaggle.com/varsha300/fastai-starter</a>