**PRANJALI MADUR**

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**SUMMARY**

Passionate and detail-oriented Embedded Software Engineer seeking a great start. Looking for an opportunity to put my technical knowledge and make a substantial contribution by solving real world complex problems. I have a strong technical background essential to this role, including C, C++, and Assembly language.

**EDUCATION**

**Master of Science**, Electrical Engineering *Aug 2018 - May 2020*

University of Texas, Arlington

**Bachelor of Engineering**, Electronics and Telecommunication *Aug 2013 - May 2016*

MKSSSs Cummins College of Engineering for Women

**SKILLS**

**Programming Languages**: C, C++, Assembly, Python  
**Development Environments**: MS Visual Studio, CCS, Keil **Peripherals**: UART, I2C, SPI, CAN, GPIO, ADCs

**Hardware**: PCB designing, Circuit debugging, Schematics, PCB soldering, Oscilloscope

**Tools**: GIT, BASH, Embedded Linux

**Systems**: Linux/Unix, Windows

**Soft Skills**: Team player, Willingness to learn, Problem-solving, Motivated

**EXPERIENCE**

**Manufacturing Engineering Intern**, PROCEPT BioRobotics *Sep 2020 - Dec 2020*

*•* Performed assembling and functional inspection process on a test fixture and testing diﬀerent sub-assemblies on the

Manufacturing floor.

*•* Developed a Rework manual for various finished goods to improve the rework process time and increase production   
 rate by 75% using DFM, pFMEA, dFMEA and rework steps.

*•* Improved the manufacturing process instructions and quality inspection documents for ease of understanding of the

operators.

**Software Engineer**, Atos India Pvt LTD *Feb 2017 - Jul 2018*

*•* Performed migration of production servers from a customer environment to cloud platform(AWS/Azure/DCiaBox)

using Platespin migration tool.

*•* Lead a team of 15 people and delivered the project ahead of schedule by delegating the tasks.

*•* Developed a web application using Servlets, Database and web development languages.

**PROJECTS**

**Real Time Operating System for ARM Cortex M4**

*•* Audited the course, real time bluetooth networks from UT Austin and implemented a real time operating system to

create a fitness tracking device on the TM4C123GH6PM using BOOSTXL-EDUMKII and CC2650.

*•* Created Real Time OS for ARM Cortex M4 using Embedded C supporting cooperative and pre-emptive task scheduling

and inter-task communication.

*•* Supported system calls such as yield, sleep, suspend along with semaphore functionalities including priority

scheduling and priority inversion techniques.

**Low Cost Programmable Pulse Generator with Automatic Level Control**

*•* Implemented a TM4C123GH6PM based embedded project in Code Composer Studio IDE using Embedded C.

*•* Designed a signal generator circuit generating various waveforms with controllable amplitude, frequency and oﬀset.

*•* Controlled number of cycles of the sine waveform and duty cycle of the square waveform.

*•* Command line interface capable of controlling the system and providing measurements data back to the user(UART

interface).

**SDRAM Controller design using Processor 80386DX**

*•* Designed SDRAM controller that allows SDRAM memory(MT48LC8M8A2) to interface with Microprocessor 80386DX

having asynchronous memory support.

*•* Determined Read and Write Cycles for diﬀerent Burst lengths(2,4,8) for the SDRAM.

**Automatic Destination Vehicle for Transportation of Lab Equipment in College**

*•* Implemented Atmel AT89s52 microcontroller project using Embedded C in Keil ţvision4 IDE.

*•* Developed a system carrying payload using RFID reader, GSM for communication and Line Sensors for vehicle move-

ment.

*•* Built a prototype system that does the job without any delay specially when peons are not available in college.