Mayur Nilkanth Talole

web: www.utdallas.edu/~mnt150230

LinkedIn: www.linkedin.com/in/mayurtalole mnt150230@utdallas.edu | +1 469 664 3694

OBJECTIVE:

Seeking a challenging, dynamic Internship/Co-op position in the field of Computer Engineering for Summer/Fall 2016.

EDUCATION:

Master of Science (M.S.) in Computer Engineering May'17
The University of Texas at Dallas, Texas, USA - GPA: **3.55 / 4**

B. Tech. Electronics Engineering with Honors in Signal Processing and Communication engineering, June'15
VIT (Savitribai Phule Pune University), Pune, India - CGPA: **8.64 / 10**

WORK EXPERIENCE:

Project Trainee at Tata Motors Ltd., India Summer'14

- Modelled and developed Exhaust Gas Recirculation control strategies for Bharat Stage III platform.
- Implemented Learning Strategies on Embedded Platform for decision making on EGR valve in Electronic Control Units of vehicles, implemented in Simulink and demonstrated test rig of ECU of respective vehicle.

RESEARCH WORK/ PUBLICATIONS:

- Worked for **MIT India Smart Toilet Initiative** presented in **ReDx 2015** camp by IIT Bombay and Massachusetts Institute of Technology, USA and developed a robot for sampling and advance disease detection from faeces.
- "**Safety using Road Automated Wireless Communicating Smart Helmet Application (SURACSHA)** ", International Journal of Engineering Research & Technology (IJERT), Vol. 3 - Issue 9 (September 2014).
- "**Hetertogenous Database Migration using ODTDM Supported with SAX and SDM algorithms**", International Journal Of Engineering And -Computer Science, Volume 3 Issue (10 October 2014).
- Delivered Seminar on **Rise of personal robotics in our life** at VIT, Pune.

PROFICIENCY AND SKILLS:

Programming- C, Java, HTML, CSS, MATLAB, C++ (learning) Python (learning), MySQL, VHDL, Embedded C, AVR-GCC, Assembly, Ladder (PLC systems), UNIX scripting.

Tools- L^AT_EX, MS office, Eclipse IDE, GitHub, Jira, Adobe Photoshop, AVR Studio, MPLAB IDE, Gem5, Keil uVision, Amazon AWS, Lab view, Dip Trace, EAGLE, Simulink, Multisim, Proteus.

Microcontrollers- Atmel ATmega 16/32/128, Microchip PIC 18F, 8051 Based, MSP430, ARM 7, TIVA ARM.

Operating Systems- MS Windows, Linux (Ubuntu).

PROJECT UNDERTAKEN:

Universal tracking app for public transportation Spring'16
Developing an Android app using with Amazon AWS for tracking all public transportation. DynamoDB is used for storing the current GPS location of user and based on the network of all buses real time suggestions will be given.

IoT based Solar tracking panel mechanism system Fall'15
Designed mechanism using servos and photo sensors for controlling orientation of panel according to sun consists of TIVA ARM Cortex along with educational sensor board from TI and CC3100 Wi-Fi module to get weather data and generates user notification. Local troubleshooter and manual control was created using HTML and stored it on board.

Redesigned the UNIX files system V6 to increase system memory limits. Fall'15
Redesigned the existing file system to change memory limits using the unused bits of inode flag. The shell was made in C using system calls to implement basic UNIX commands like creating directory, copying large files etc.

LetpicEnhance Learning to estimate transient parameters in computational digital photography for image enhancement. Developed a system to determine camera parameters to capture a perfect image of fast moving object using learning techniques in MATLAB and in the thesis proposed the concept of camera behavioral entity.

SURACSHA Safety using road automated wireless communicating smart helmet application. May'13- June'14
Designed the embedded system for detection of accident condition and notification to nearest hospital using gyroscope and vibration sensors with microcontroller. This project was winner of best semester mini project in college.

SEVAC Smart and Efficient Vehicle for Automatic Cleaning Jan'13- Dec'13
Responsible for automatic garbage detection using camera and cleaning mechanism with embedded platform. This project was submitted to IEEE/IBM smarter planet challenge 2013 and was internationally recognized.

RELATED COURSEWORK:

Design and analysis of algorithms, Computer Architecture, Operating Systems Concepts, Pattern Recognition, Data structures, Advanced Computer Networks, Embedded systems, Microprocessor Systems.