

MANAJ MOHAPATRA

Software Engineer

@ manaj.mohapatra2041@gmail.com +91-7978489362 in linkedin.com/in/manajmohapatra github.com/ManajMohapatra

EXPERIENCE

Software Engineer

IMH Team, Texas Instruments India

Aug 2016 – Present Bangalore, India

- Micro-driver and Linux driver development for light sensors
 - Software and Hardware
 - * Programming Language: C
 - * Tool: Intel FDK, GCC
 - * Hardware: Raspberry pi 3, Intel Tiger Lake, Intel UPX
 - * Sensor: Ambient Light Sensor, Color sensor
 - Motivation
 - * Understand system standards and work with ODMs to develop device driver
 - * Development involves calibration, testing, certification, release and customer support
- Lead developer of lab automation tool
 - Software
 - * Programming Language: Python
 - Applications
 - * The tool is used by more than 250 people across multiple product lines
 - * It is used for device configuration, data capture, analysis, visualization and logging
 - * Ecosystem provides standardized way to create device and instrument controller and automatically generates GUI
 - * User can build custom GUIs by drawing or copying widgets
 - * It can be compiled to executable and shared with customer
- Register mapping tool
 - Software
 - * Programming Language: Python
 - Applications
 - * Tool captures device information during design cycle in an efficient data structure
 - * Provides an ecosystem that allows to create, modify and navigate stored information
 - * Provides APIs to export information in different formats like RTL, C, C++, IP-XACT and HTML etc

EDUCATION

Master of Technology

VLSI Design & Embedded Systems

National Institute of Technology, Rourkela

May 2015 – May 2016 Odisha, India

Bachelor of Technology

Electronics & Instrumentation Engineering

National Institute of Technology, Rourkela

Aug 2011 – May 2015 Odisha, India

AREA OF INTEREST

- Embedded systems
- Automation and application development

SOFTWARE

C, Python, Git, Intel FDK ●●●●●

CCS, Qt, C++ ●●●●●

HARDWARE

OPT3004, 4001, 4048 ●●●●●

Intel UPX, MSP430F5529 ●●●●●

AWARDS

Gold Recognition 2019
Significant reduction in device bring up time by combining multiple device communications to single transaction

Automation Champion 2017-2018
Development of custom GUI platform that enables draw and copy widgets for in-house automation tool

Silver Recognition 2017
Identified gaps and developed useful features in register mapping tool

PUBLICATIONS

- Software and Hardware Architecture For Efficient Validation at TIITC 2023, Bangalore
- Novel GUI for Customer Evaluation at TIITC 2023, Bangalore

PROJECTS

- A collection of RTOS projects developed using FreeRTOS library in Arduino IDE
- Python based windows OS application that gives access to video processing attributes

ARTICLES

- Bundle Large Python Application using PyInstaller
- Create Installer of Python Program for Windows OS using Inno Setup