

MANAJ MOHAPATRA

Software Engineer

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EXPERIENCE

Software Engineer

IMH Team, Texas Instruments India

📅 Aug 2016 – Present 📍 Bangalore, India

- Micro-drivers for light sensors
 - Software and Hardware
 - * Programming Language: C
 - * Tools: Firmware Development Kit, GCC
 - * Devices: ALS, Color sensor
 - Motivation
 - * The development involves APIs building, device bring-up, calibration, data processing, verification and certification
- Color correction tool
 - Software and Hardware
 - * Programming Language: Python
 - * Device: TI color sensor
 - Application
 - * The tool adjusts white balance of live video from camera depending upon the readings received from color sensor
- Lead developer of lab automation tool
 - Software
 - * Programming Language: Python
 - Applications
 - * Write test programs for device
 - * Data capture, visualization, analysis and logging
 - * Device configure and instruments control
 - * Custom GUI for better representation
 - * Compiled executable for customers
- Register mapping tool
 - Software
 - * Programming Language: Python
 - Applications
 - * Captures device information during design cycle
 - * Stores information in an efficient data structure which can export information in required formats like RTL, C, C++, IP-XACT and HTML etc
 - * Provides an ecosystem that allows to create, modify and navigate the data structure
- Pick and Place
 - Software and Hardware
 - * Programming Languages: Python, G-Code
 - * Board: TinyG Controller
 - Applications
 - * Automate device testing in tester platform
 - * Device status detection like present, absent, tilt using computer vision algorithms

EDUCATION

Master of Technology

VLSI Design & Embedded Systems

National Institute of Technology, Rourkela

📅 May 2015 – May 2016

Bachelor of Technology

Electronics & Instrumentation

National Institute of Technology, Rourkela

📅 Aug 2011 – May 2015

AREA OF INTEREST

- Embedded Systems
- Automation and application development

SOFTWARE

C, C++, Python, Git ●●●●●

Markdown, Qt, Bash ●●●●●

HARDWARE

OPT3004, 3007, 4001, 4048 ●●●●●

FTDI devices, ZCU-702 ●●●●●

AWARDS

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

🏆 **Automation Champion 2017-2018**
Development and integration of Custom GUI platform for in-house automation tool

🏆 **Silver Recognition 2017**
Identify gaps and improve user experience by adding new features in register mapping tool which increased productivity