# TINTU JOSE

Irvine, CA 92612 | (949) 899 7704 | tintjose@gmail.com | https://tintjose.github.io/portfolio\_tintu/

#### **SUMMARY**

- Experienced in software development, programming, Internet of Things (IoT), user interface (UI) and also in server side development.
- Skilled and Passionate about Front end and Back end development.
- Quickly learn and master new technologies; successful working in both team and self-directed settings along with persistence and focus on result.
- Good understanding of Software Development Life Cycle and OOPS concepts.

#### **TECHNICAL SKILLS**

Languages	Java ■ C ■ C++ ■ Python ■ Android
Database	MySQL • SQL Server • IBM Cloudant • MongoDB(NoSQL)
Operating System	Windows ■ Mac OSX ■ Linux ■ Raspbian
Web Technologies	HTML5 • CSS3 • JavaScript [ES6] • React.js • Redux • REST API • AJAX • jQuery • Webpack
Protocols	HTTP ■ TCP/IP
<b>Technical Tools</b>	Eclipse • Android Studio • Arduino IDE • Blockchain • Tangle • IOTA • Microsoft Office Suite •
	G Suite • Gradle • Git

## **PROJECTS**

## Institution: University of California, Irvine

#### Project Name: GSR & PPG based Ubiquitous Stress Monitoring using Smart Rings in AWS EC2

- Developed the client side using android app to collect raw GSR and PPG bio signal from a BLE-based smart ring.
- Designed REST API with Flask microframework on server side.
- The app sends the data through HTTP API to a AWS EC2 web server and stores it in database using MongoDB and the server calculates the stress level of subject in real time based on GSR and PPG signals.
- Implemented mail notification of stress report analysis to user.
- Improved the collected stress data by removing the noise using filter.

## **Institution:** University of California, Irvine

# <u>Project Name</u>: Burger Builder Application using React and Redux

- The application uses all the new features introduced in ES6.
- The application is a single page application with proper components and is Mobile Responsive.
- The Application also used proper authentication and from validation and implements routing uses React Router.

#### **Institution:** ICURO Autonomous Laboratory

Date: 2018-Present

**Date**: 2018

Date: 2018

**Date**: 2017

**Date**: 2018-Present

**Date**: 2018

#### Project Name: Electric Vehicle and an EV Charging Station Transacting Payments Live with IOTA

- Designed applications for payments through JSP.
- Created machine-to-machine communication using MQTT between electric car and an EV charging station by utilizing IOTA.

## **Institution:** University of California, Irvine

# Project Name: Implementation of a Real-Time Canny Edge Detection using a Raspberry Pi and Webcam

- Executed the Canny Edge Detector through OpenMP and POSIX threads which reduced execution time by approximately 25%.
- Specified and synthesized performance modelling at a system level using SystemC.
- Enhanced throughput of Canny Edge Detector from 0.97 to 4.17 frames per second (FPS).

#### **Institution:** University of California, Irvine

### **Project Name:** Client/Server with variable One Time Pad security

• Designed TCP/IP networked application which allows a client program to query a simple database which is managed by a server program with One Time Pad security applied for both client and server communication.

#### **Institution:** University of California, Irvine

#### **Project Name:** IOT Swarm connecting to IBM Watson Cloud

- Utilized the following technical tools in accomplishing various duties:
  - ESP 8266 devices with photocell sensor and readings presentation;
  - Raspberry Pi as the server for log data submissions;
  - Python code running on the RPi sending the master's lux to node-red and IBM Watson; and
  - IBM Watson for saving and retrieval through Cloudant database to conduct simple statistics on the data.

https://github.com/tintjose

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## **EDUCATION**

# Master of Science in Embedded and Cyber Physical Systems: Jun 2018

University of California – Irvine, Irvine, CA (CGPA 3.75/4.00)

#### Bachelor of Technology in Information Technology: May 2015

Anna University - Chennai, TN, India (CGPA 8.69/10.00 ~ Rank Holder) (Fellowship/Scholarship)

# **WORK EXPERIENCE**

## MARIA EXPORTS- CHENNAI, TN, INDIA

**Date**: 2016-2017

- Drove key efforts in boosting the continuous growth of acquisitions and channel partnerships.
- Developed an exporting unit and an online presence, thereby improving business visibility among clients and leading conversion of the proprietary firm to Santa Maria International Pvt. Ltd.
- Formed a new technical team and lead them in new developments to secure business.
- Administered organizational budgets, operational planning and forecasting, primary division goals, and key measurements while monitoring the development of internal controls.

#### JOGEO ENTERPRISES - CHENNAI, TN, INDIA

### **Management Associate**

**Date**: 2015-2017

- Conceptualized and implemented technical initiatives, which improved customer base turnover by 25% in two years.
- Developed office tools using Visual Basic with Microsoft Access as backend for the company account maintenance.
- Managed the company's administration and finance, while dealing with the statutory offices in acquiring licenses.
- Designed back office software for accounts.

# F&R Data Analytical System & Solutions Pvt., Ltd. - Bangalore, KA, India

#### **Technical Intern**

**Date**: 2015

 Provided hands-on assistance to the team regarding offline survey tool development for market research on Windows platform.

#### **CONFERENCES**

- **Jose, T.** (2015). *Implementation of traceability and securing the shared data in the cloud using double encryption scheme.* National Conference of NCONNECT'15, S.A. Engineering College, Chennai, TN, India.
- **Jose, T.** (2015). Securing the shared data in the cloud using enhanced secure erasure code. NCRASEM 2015, Tagore Engineering, College, Chennai, TN, India.
- **Jose, T.** (2016). Deep learning model for cyber bullying detection in the text representation for social media. International Conference of ICET, ISER, Chennai, TN, India.
- **Jose, T.** (2016). Secure and privacy off-line micropayments for the resilient device. International Conference of ICCSIT-PUNE, IRAJ Research Forum, Pune, MH, India.