Department of Computer Science & Engineering
CMR TECHNICAL CAMPUS
(Approved by AICTE, New Delhi affiliated to JNTU, Hyderabad.)
Center of Excellence-Internet of Things
(COE-IOT)

Memorandum of Understanding & Non-Disclosure Agreement

Between

CENTRE OF EXCELLENCE IN IOT, CMR TECHNICAL CAMPUS

AND

CLOUDCHIP TECHNOLOGIES PRIVATE LIMITED

This Memorandum of Understanding (hereinafter referred to as "MOU") entered into on 24th Jan 2018 at Hyderabad between a functional unit of Company named, **Cloudchip Technologies Private Limited** (hereinafter referred to as "Company")having principle office located at #11-13-915, 3rd Floor, Road No 1, Greenhills Colony, Kothapet, Hyderabad, Telangana - 500035 and **Centre of Excellence in IoT,** CMR Technical Campus (hereinafter referred to as "CMRTC") located at village Kandlakoya, Medchal, Secundrabad, Telangana-501401.

Project Support on IOT

- **Duration:** 24th January' 2018 to 17th March' 2018 (45 days program)
- **Team Size:** 2 to 4 students per project
- **Laboratory equipment related to projects**

Payment Terms:

1. For the Projects payment have to make in 50% advance by 3rd Feb 2018 and remaining of the amount will be paid on last day of support.
2. For any further programs such as training programs, FDP etc., the payment must be made seven days prior to the program start date.

General Terms:

1. Confidential Information - Any information like business strategy, document, training plan, courseware, outline, client name and client business strategy will be considered confidential information and shall not be share with any third party without prior mutual consensus between both the parties.

2. Lab Requirements - College must provide desktops or student must have laptops with 4GB RAM, 64-bit Architecture, Internet bandwidth of minimum speed of 2 Mbps, 100 GB free space of HDD, and Projector.
3. Intellectual Property right (IPR) – IPR of training delivered by company or to be delivered by company through CMRTC client will remain with company. CMRTC will only hold Marketing rights for training portfolio to be delivered by company with prior mutual consensus on time to time basis.
4. All financial will remain highly confidential between both the parties and will not be disclosed to any third party without prior intimation among the parties herein.
5. The agreement imposes no obligation upon either of the parties with respect to confidential information that becomes a matter of public knowledge through no fault of reseller.
6. Period of Validity - This agreement shall be initially valid for one year from the date of signing the agreement and to be renewed subsequently by mutual consent of both the parties.
7. The commercials will vary as per market situation for each specific project commencement or during the period of association.
8. Termination - This MOU can be terminated by either party with prior notice of 60 days.
9. Amendment to the Agreement - The obligation of the Company and CMRTC have been outlined in this agreement. However, during the operation of the agreement, circumstances may arise which call for alteration or modifications of this Agreement. These modifications/alterations will be mutually discussed and agreed upon in writing.
10. Arbitration - Any dispute arising with regard to any aspect of this Agreement shall be settled through mutual consultations and agreements by the parties to the Agreement.

The effective date of this MOU is the date of the signature last affixed to this page.

Director
CMR Technical Campus

18.1.18

Director
CMR Technical Campus
Kandlakoya (V), Medchal (M&D),
Hyderabad, Telangana-501 401.

18.1.18
Managing Director
Cloudchip Technologies Private Limited

Appendix A

Plan of Action

1. Students has to form as Team and can select one of the problem statements above to be solved as part of their project.

2. Brain storming session for the students to understand the requirements of the problem statement by Cloudchip Team.

3. In classroom training understanding the software and hardware development for IOT devices.

Cloud Application design for IOT Devices

- Software development Life cycle
- Programming Languages for IOT development
- Process to develop IOT CLOUD applications
- Setting the Local Environment for application development
- Configuration management tool for project tracking

Understanding the IOT Architecture and Application design

- Creating the basic web applications for IOT Devices
- Creating the web application for updating the data into database for IOT Devices
- Creating the web application for Reading the control IOT Devices
- Developing custom urls for read and write operations by IOT devices

Understanding the hardware

- Basics on Hardware
- Powering and booting the IOT Hardware
- Detail pin description and precautions
- Serial communication
- Switches, Sensors and led's interfacing
- Various communication protocols and usage in IOT
- Cloudchip device control libraries introduction
- Cloudchip Sensor libraries introduction
- Cloudchip display libraries introduction
- Cloudchip IOT libraries

4. After introduction session the teams need to start working on their problem statements as part of their internship under the guidance of Cloudchip Expert Team.

General information and Guidelines

1. All the team members must satisfy 24hrs of work in a week to avail the internship and need to fill in the Cloudchip time sheet.

2. Work will review daily basis for each team.

3. Pre-information is required for availing the leaves

Training Plan: Weekly any 3 days in college support by Cloudchip Team

Cloudchip Team Details:

Narsimulu Cinasi – Hardware and Cloud development support
Ashwanth, Shiva Nagendra - Cloud development support
Saikiran – Hardware support

Contact Details:

Contact Person: Narsimulu Cinasi
Designation: Managing Director
Email: narsim@cloudchip.in
Phone: +91 9108456695

Estimation for Support Charges:

Pricing for the support for each student		Rs. 5000
Internship and Cloudchip IOT Certification		Rs. 2500
Hardware Price	Included in the support	
Sub-Total		Rs. 7500
Discount (70%)		Rs.5250
Total after discount (ExclGst)		Rs. 2250
SGST 9% Rs.202.5 CGST 9%		Rs. 202.5
Total (Inc GST)		Rs. 2655

CLOUDCHIP
INNOVATIONS OF THINGS

IOT PROJECT SUPPORT PROPOSAL

Agenda to support the students develop the IOT based device and cloud application to solve the real word problems.

Planned Projects(problem statements):

1. Design and develop ofHTTP web services to communicate with IOT hardware
2. Design and develop of MQTT web services to communicate with IOT hardware
3. Reading Multisensor data and logging into the cloud using IOT services
4. Real time Attendance System over IOT along with monthly / yearly analytics
5. Monitoring the incubator conditions, logging and triggering the emergencies using IOT
6. Smart Water Metering using IoT.
7. Design and development of cloud digital and analog controls for Automation.
8. Reading the weather information and emergencies from the cloud and updating the on the device dashboard using IOT Services.
9. Developing the cloud control library for IOT devices
10. Accessing the IOT control library for indication on control switches based on event.
11. Developing the control library feedback logging system based on IOT device events.
12. Study and analyzing the various encryption methods for cross platform data encryption and decryption methods for Secure IOT devices.
13. Designing Cloud Gauge Indicators for IOT Data loggers.
14. IOT Based multi functionality robots.

* Description of each problem statement available in the Appendix A

Cloudchip™ Technologies Pvt. Ltd.,
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