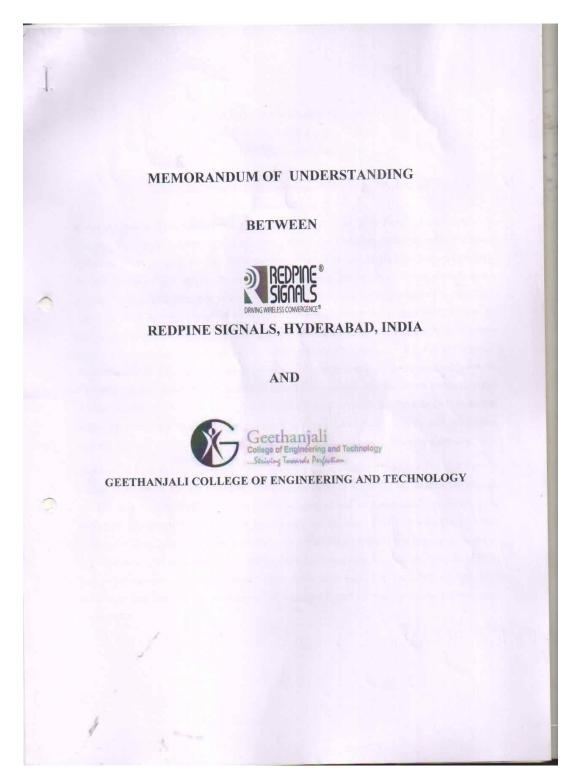
IoT Center of Excellence in Association with Red Pine Signals Pvt Ltd.



MEMORANDUM OF UNDERSTANDING

BETWEEN

Redpine Signals, Hyderabad, India

AND

Geethanjali College of Engineering and Technology, Hyderabad

ON March 04, 2017

Redpine Signals, Hyderabad, India (hereinafter referred to as "First Party"), Headquartered in San Jose, California, Redpine Signals, Inc., is a fabless semiconductor, M2M devices and wireless system solutions company focusing on innovative, ultra-low power and high-performance products for next-generation wireless applications. Redpine was founded in 2001 and was the first in the industry to launch an ultra low power and low-cost single-stream 802.11n chipset in late 2007. Again, in 2009 Redpine pioneered the adoption of self-contained 802.11abgn modules into the then emerging M2M market. In 2013, Redpine introduced the world's first multiprotocol wireless chipset for the Internet of Things market – featuring Wi-Fi, dual-mode BT 4.0, and ZigBee. Redpine has created multiple products based on this chipset including n-Link (hosted), Connect-ion (embedded) and WiSeConnect (advanced embedded) modules. Redpine offers technology and products covering multiple market segments in the IoT (industrial, medical, automotive, connected home, smart energy, building automation and real-time locationing), mobile and networking markets. Redpine's technology and product portfolio includes chipsets, modules and devices.

Geethanjali College of Engineering and Technology,(hereinafter referred to as "Second Party"), located at Sy.No.33 & 34, Keesara(M), Yadgarpally X Road, Cheeryal, Hyderabad, Telangana-501301, having established in 2005, is a NBA Accredited and an Autonomous Institution. The Institution is approved by AICTE and permanently affiliated to JNTUH. The Institution offers B.Tech., M.Tech., MBA and Pharma courses. The Institution is equipped and geared up to take on the responsibility of providing exceptional quality education and to bring out creativity in students that would promote innovation, research and entrepreneurship. The Institute's mission is to collaborate and contribute to advancement of engineering and technology that would help meet social needs.

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WHEREAS

The parties agree to extend cooperation in furthering industry-academia collaborative activities for mutual benefit, the first party having expertise in developing solutions and carrying out research in the Internet of Things, would like to offer its WyzBee IoT platform, a unique product integrating hardware, cloud services, and other software, that enables easy creation of complete IoT applications to second party. In the future, this cooperation may be in multiple areas that may be defined and jointly agreed upon by the two parties.

THE PARTIES HAVE REACHED AN UNDERSTANDING AS FOLLOWS:

This Memorandum of Understanding will not give rise to any financial obligation for either party. This Memorandum of Understanding will come into effect on the date of signing and will remain in effect till either of the parties would like to come out of the understanding with prior notice to the other party.

Responsibilities of the first Party (Redpine):

- To provide Redpine's WyzBee IoT platform, including boards, software, and documentation, to second party at special rates, comparatively less than market rates.
- To provide training for chosen faculty of second party through a hands-on workshop.
- To provide a platform for support of students of second party during project execution.
- To offer lectures and technical discussions aimed at keeping faculty apprised of advances in this area, as identified by Redpine through market research and interaction with customers worldwide
- To review or suggest areas of focus, identification of projects, etc.
- To provide Certificates of Completion upon successful execution of lab exercises and a project
- Optionally, to provide outline course contents for a one or two semester course on IoT and related technologies

Responsibilities of the second Party (Geethanjali College of Engineering and Technology):

- To create a laboratory for IoT, equipping it with a minimum of 20 WyzBee boards procured from Redpine through its local sales channel
- To equip the lab with other essentials such as PCs, power supply, internet access via Wi-Fi, etc.
- To organize and execute training courses and sessions based on the designated IoT Platform, including pre-requisites.
- To assign faculty and staff to take up the assigned activity.
- To support students taking up of projects based on the platform.
- To purchase and equip laboratories with additional platforms and peripherals in accordance with the institution's policies, sufficiently.
- To support the defined courses and lab work.
- To identify applications and research areas based on studies carried out, and the insight of, faculty and students.
- To prepare to offer real world solutions to problems in areas identified as thrust areas by government of India and Government of Telangana policy.

Signed by MMAM for and on behalf of the Redpine Signals Inc. Hyderabad

Mr. N. Venkatesh Senior Vice President Advance Technologies M/s. Redpine Signals

In the Presence of C. North Start Mr Narasimha Chary Product Manager Redpine Signals Hyderabad Signed by RM for and on behalf of the

Geethanjali College of Engineering and Technology, Hyderabad Mr. G. R. Ravinder Reddy Chairman, Geethanjali College of Engineering and Technology

In the Presence of Dr Udaya Kumar Susarla & Magazing 90410317 Principal, Geethanjali College of Engineering and Technology Hyderabad Date: 07/08/2017. From

Dr. Nagendra Kumar, HOD, CSE Geethanjali College of Engineering and Technology,

To Mr N Venkatesh, Senior Vice President RedPine Signals. Hyderabad

Ref: MoU between GCET-REDPINE SIGNALS, dated 04/03/2017. Sub: Setting up of Redpine signlas laboratory at GCET with your valuable support.

Dear Mr Venkatesh,

We are glad to inform you that we have established a lab to impart hands-on training to our students in the area of "WyzBee IoT Platform" with the equipment following equipment donated by your esteemed institute.

We are extremely grateful to two your colleagues to visit our college for helping our students in conducting the above experiments. This helped our students/faculty to expose to the technical expertise/ knowledge in IoT.

Our students were trained in batches in conducting the experiments regularly. We found that this activity strengthened our knowledge in the area of IoT. We are confident that this activity would fetch better job prospects to our students. We further hope that this kind of activity will follow in future with your valuable association.

Thanking you, with respectful regard.

(Dr. Nagendra Kumar)

Copy to the Principal/CSE Department



Fig 1:IoT Center of Excellence in Association with Redpine Signals Pvt Ltd.



Fig 2:IoT Center of Excellence in Association with Redpine Signals Pvt Ltd.



Fig 3:IoT Center of Excellence in Association with Redpine Signals Pvt Ltd.