

## SMART HIRE SOFTWARE SOLUTIONS

Dt:17<sup>th</sup> May 2018

**The principal**

Gokaraju Rangaraju Institute of Engineering and Technology,  
Bachupally,  
Kukatpally 500090.

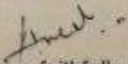
**Ref: Technical Consultancy support for Automation and monitoring Tools development division.**

Dear Sir/Madam,

This has reference to the software development module titled "College place" which is an automation monitoring tool, for the Smart Hire solutions Pvt. Ltd, like to take product development consultancy support from Dr. K. Butchi Raju Department of Computer Science and Engineering of your college.

In this Smart Hire solutions Pvt. Ltd provisionally considered your technical consultancy for the financial assistance of Rs.3,00,000/- (In words Three lakh rupees only).

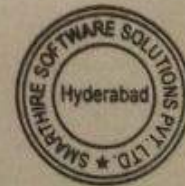
In this consideration Dr. K. Butchi Raju is interested in undertaking the project, the enclosed acceptance agreement copy may be filled and sent to this to Smart Hire Solutions Pvt. Ltd.

  
Yours faithfully  
Anil Kumar Pinnaka  
Manger

Copy to:

**Dr. K. Butchi Raju**

Department of Computer Science and Engineering,  
Gokaraju Rangaraju Institute of Engineering and Technology,  
Bachupally,  
Kukatpally 500090



# AMPLE AUTO TECH PRIVATE LIMITED

Manufacturer & Exporter of Steering & Suspension Parts



Dt: 25.12.2019

No.:

To,

Dr. G. Ramesh  
Associate Professor, CSE Department,  
Gokaraju Rangaraju Institute of Engineering & Technology,  
Bachupally, Hyderabad 500090.  
Telangana, INDIA.

Kind Attn: Principal, GRIET

Sub: Work order for Detailed Engineering Consultancy Services for the Work of the Following Project:

**Deep Learning Based Artificial Intelligence for Machine Fault Signature Analysis and Classification**

Ref: Your Project Proposal dt: 17.09.2019

Dear Sir,

In line with the discussions that we had, we are pleased to confirm you our work order to carry out the Engineering Services for the works mentioned under subject.

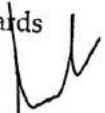
You are requested to please treat this as Letter of Acceptance (LOA) with the entrusted work as per the details stated below:

**Deliverables:**

- Evaluation of Storage of Sensed Data from Machinery to Cloud Infrastructure
- Developing Pre-processing and feature extraction Methods
- Identification of pre-trained deep learning models
- Implementing deep learning Models

We hereby accept your financial proposal of Rs. 6,76,892/- (Rupees Six Lakhs Seventy-Six Thousand Eight Hundred and Ninety-Two Only). Kindly send proforma invoice and bank details for further process. Time period for the project is 1 year from LOA issue date. Terms & Conditions remain same as per MoU.

Regards

  
Arvind Choudhary  
Managing Director  
Gurgaon, Haryana

Corporate Office & Unit -I: Plot No. 61, Sector- 3, IMT Manesar, Gurgaon, Haryana, India-122050  
Telephone No.: +91-124-2290055, +91-124-4265757

E-mail: marketing@atek.in

Website: www.atekworld.com

CIN- U34300DL2005PTC134947

GSTIN - 06AAFCA1574R129

001219



Dt: 24.12.2019

No.:

To,

**Dr. A. Sai Hanuman.**

Professor, CSE Department,  
Gokaraju Rangaraju Institute of Engineering & Technology,  
Bachupally, Hyderabad 500090  
Telangana, INDIA.

Kind Attn: Principal, GRIET

Sub: Work order for Detailed Engineering Consultancy Services for the Work of the Following Project:

**"MACHINE LEARNING BASED AUTOMATION OF THE HARDNESS AND TORQUE TESTS CONDUCTED FOR THE PRODUCTS DEVELOPED"**

Ref: Your Project Proposal dt: 23.09.2019

Dear Sir,

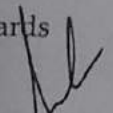
In line with the discussions that we had, we are pleased to confirm you our work order to carry out the Engineering Services for the works mentioned under subject. You are requested to please treat this a Letter of Acceptance (LOA) with the entrusted work as per the details stated below:

**Deliverables:**

1. Study of hardness and torque tests conducted for products developed
2. Preparing the supervised ML algorithms on data of automation hardness and torque tests
3. Provide detail test reports to client

The research aims at highlighting how the applications of machine learning practices are becoming the key drivers of innovation in mechanical engineering including component design, asset operation and maintenance, fault detection and diagnostics, maintenance optimization and to improve customer satisfaction of the quality of Ample Auto Tech Pvt. Ltd. We hereby accept your financial proposal of **Rs. 5,99,119/- Per Year (Five Lakhs Ninety-Nine Thousand One Hundred and Nineteen Rupees Only)**. Kindly send proforma invoice and bank details for further process. Time period for the project is 1 year from LOA issue date. Terms & Conditions remain same as per MoU.

Regards

  
Arvind Choudhary  
Managing Director  
Gurgaon, Haryana

Sri  
**RAMAKRISHNA DENTAL CLINIC**

Shop No.1, Sneha Enclave Behind Reliance Fresh, Mythri Nagar, Hyderabad.

**Dr. Ramakrishna Raavi**

M.D.S.

ENDODONTIST & IMPLONTOLOGIST  
Conservative Dental Surgeon

**Professor :**

S.B. Patel Dental College,  
Bidar



**Dr. Mamatha**

B.D.S.(Osm)

Mobile : 98666 94368  
Timings : 9 am to 1 pm  
5 pm to 9 pm

Patient Name.....Age.....Date.....

Dt: 01.02.2019

**R**

To,

Dr. K.Madhavi  
Professor, CSE Department,  
Gokaraju Rangaraju Institute of Engineering & Technology,  
Bachupally, Hyderabad 500090.  
Telangana, INDIA.

Kind Attn: Principal, GRIET

Sub: Work order for Detailed Consultancy Services for the Following Work :

Ref: Your Project Proposal dt: 01.02.2019 **Patient Management System**

Dear Sir/Madam,

In line with the discussions that we had, we are pleased to confirm you our work order to carry out the Engineering Services for the works mentioned under subject. You are requested to please treat this a Letter of Acceptance (LOA) with the entrusted work as per the details stated below:

**Deliverables:**

Implementation and Executable Software, Provide progress report to client

We hereby accept your financial proposal of **Rs. 10,000/-** (Ten thousand Rupees Only). Kindly send proforma invoice and bank details for further process. Time period for the project is 2 months from LOA issue date.

*Mamatha*  
Regards

Dr. Ramakrishna Raavi  
Ramakrishna Dental Clinic  
Mythri Nagar, Hyderabad

**DENTAL IMPLANTS ARE ALSO AVAILABLE**

Specialist in : \* Root Canal Treatment \* Treatment of Discolouration of Teeth due to Pan  
Gutka eating \* Flourosis \* Fixed teeth (Ceramic) arrangement \* Tooth Fractures  
\* Wisdom tooth problems \* Cosmetic Surgery (Correction of Protruded Teeth and jaws)

**NOTE : Please Bring this Prescription with your next visit**

**MEMORANDUM OF UNDERSTANDING**

**BETWEEN**



**CENTRE OF EXCELLENCE FOR HIGH PERFORMANCE COMPUTING**

**LAB, DEPARTMENT OF CSE, GRIET [COE-HPCL]**

**AND**

**N.P.DESAI(Director) [SMEA Analytics Pvt Ltd(SMEA)]**

This memorandum of understanding is made and entered into on 20<sup>th</sup> Day of August, 2019 at Hyderabad.

**BETWEEN**

GokarajuRangaraju Institute of Engineering and Technology (GRIET) through the Centre of Excellence for High Performance Computing Lab (Here in after called COE-HPCL of CSE department: "Executing Agency"), a Centre set up in GRIET, having its office in Bachupally, Hyderabad-500 090, Telangana, represented by the Director, Dr.Jandhyala N. Murthy, which expression shall, unless repugnant to the context or meaning thereof, mean and include its assignees of the FIRST PART.

**AND**

Mr.N.P.Desai(Director), S/o P.M. Desai having residential address at #2C, Chandra Residency, Opp: Ashoka Garden, Gate II, Old Bowenpally, Secunderabad- 500 011, Telangana representing Organization '**SMEA Analytics Private Limited(SMEA)**', which expression shall, unless repugnant to the context or meaning thereof, mean and include his successors and assignees; of the SECOND PART.

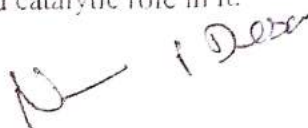
WHEREAS:

**Centre of Excellence for High Performance Computing Lab (COE-HPCL)**, is an approved Centre established in Department of CSE of GRIET to focus on collaborative research and application methodologies in the fields of Deep Learning and Artificial Intelligence.

**SMEA Analytics Pvt Ltd (SMEA)** is a Organization, dedicated to the Analyzing he balance sheet and profit & loss statements in the MSME/Small Business sector. SMEA is the brain child of Mr.N.P.Desai, a veteran in MSME Sector with over four decades of entrepreneurial experience.

SMEA Analytic given economic & social significance is currently working towards improving the underperformance of small business/MSME. It recognizes. The need of the hour is to develop structured research and modern approach towards the under-performance of MSME/small business, to support the envisaged impact on economy and jobs and NPA of banks. SMEA is proposing to institutionalize the aforementioned underperformance of the MSME/Small business sector (hereinafter called the project) and is soliciting the support of COE to be a technology partner, to play a constructive and catalytic role in it.





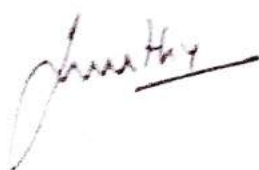
Therefore, both the parties to this MoU have had preliminary discussions in this matter and have ascertained areas of broad consensus expressly incorporating the foregoing recitals which are listed as follows:

**SCOPE OF THE PROJECT:**

1. The parties to the MoU led by the 'Executing Agency' shall work towards the execution of the project in accordance with their roles and responsibilities defined under this MoU.
2. A 'Monitoring Committee' comprising of one representative from each of the parties to the MoU shall be constituted and shall perform the task as defined under this MoU.
3. The primary focus of the project shall be:
  - a) Research-backed comprehensive understanding and summarization of issues leading to underperformance in MSME/small business.
  - b) Designing and developing technology for analyzing the balance sheet and profit & loss statement of any MSME/small business by inputs given by MSME/small business in the required format.

The technology envisaged by SMEA is part of developing the software tool to give various & financial ratios and graphs as shown in the preliminary discussion.

- i) Storage ecosystem to store the generated data.
- ii) Develop a necessary internal system based on the inputs given by SMEA (using suitable AI/ML algorithms) to give analytical interpretation to the units (MSME or SB) financial ratio.
- iii) Use various data science data analytics for developing a sectorial interpretation of many MSME/SB to arrive at various graphical or analytical pictures.
- iv) Develop various predictive analytical tools connecting micro & macro-economic inputs either for the particular unit sector.
- v) The scope of the project can be further extended based on mutually agreed objectives and goals.

 ? 0.05.00

4. The above discussed scope of the project shall be executed broadly in three parts

PART	Activity Performed	Expected Outcome
PART A	Developing software tool, particularly done by SMEA to full develop which can be scaled to handle bulk of balance sheets and P&L.	The individual analyzed balance sheet and P&L, will be useful for self-analysis, of underperformed units.
PART B	Testing the models through pilot projects and making the requisite fine tuning adjustments to the proposed model to ensure successful implementation.	Collect Data on the success models proposed and facilitate deployment on a pan-Indian scale with suitable localizations and customizations.

5. A detailed work plan for each PART shall be prepared by the Executing Agency and shall be submitted to the Monitoring Committee before commencement of work on that part.

6. The Executing Agency shall hire or appoint its own personnel and external resources for performing the assignment and will keep the Monitoring Committee informed of the current and updated list of such personnel.

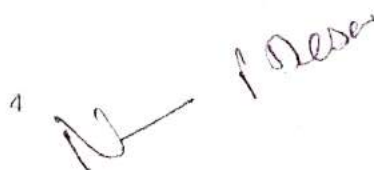
7. Any payments, including consultancy charges and honorarium, to be made to the permanent staff, faculty or other personnel engaged in performing the assignment will be made by the Executing Agency only on the basis of prior approval from the Monitoring Committee.

8. The estimated budget for the project is Rs.2 Lakhs.

#### ROLES OF EACH OF THE PARTY TO MOU

Mr. N. P. Desai(Direcor)(Through SMEA),being the originator of the initiative ,shall be primarily responsible for identifying and roping in sponsors for project and also for liaising with domestic and international investors, philanthropists and generate traction for the project. He shall also provide access to information of/from MSME/Small Business units required for undertaking research.



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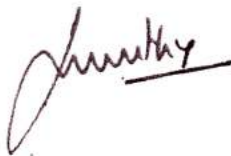


COE-HPCL shall be the '**Research and Support Partner**' to this initiative. COE-HPCL will undertake technology to development as required and summarizing them into a report form. Based on the research findings, it will take a lead role in designing and developing a sustainable eco-system model for the Revival and Rehabilitation of sick MSME units and gather empirical and statistical evidence of its performance.

### **ROLE OF MONITORING COMMITTEE**

The Monitoring Committee comprising of one Representative from each of the parties to the MoU shall be constituted upon signing of this agreement. The Monitoring Committee shall perform the following tasks.

- Reviewing the detailed work plan submitted by the Executing Agency suggesting amendments, if any, and approving the work plan.
- The Monitoring Committee represented by all its members, shall be authorized to enter into any agreements with sponsors, external resources, Government Agencies and any external parties at a later date.
- The members of the Monitoring Committee shall meet once every month during the course of the project to review the progress and take corrective action where ever necessary.
- Reviewing the schedule of payments prepared along with detailed work plan and approving the schedule of payments.
- Reviewing and approving all the payments to be made by the Executing Authority.
- Collecting and Scrutinizing the statement of accounts, statement of Fund Utilization, Receipts for the payment and other documents as may be required from the Executing Agency, adopting them and producing them for audit or scrutiny when required by a Competent Authority.
- Collect the reports prepared by the Executing Authority and adopt them. These reports may be submitted to appropriate Government Authorities, statutory board and/or RBI.



 P. Desai.

## RESPONSIBILITIES OF EACH PARTY

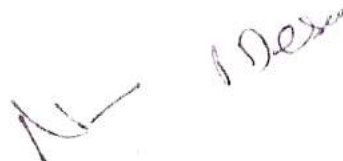
### Mr.N P Desai [Director(SMEA)]

1. 'SMEA' shall be solely responsible for identifying and roping in the requisite sponsorships and grants for the successful execution of the project.
2. 'SMEA' shall either directly on its own or through sponsorship or grants from Corporate houses or philanthropists to support the financial requirements of the project.
3. 'SMEA' shall develop a list of MSME units in various sectors, and solicit their support to be a part of case studies for the proposed research by designated research team from COE-HPCL, GRIET.
4. 'SMEA' shall co-ordinate between MSME units under Research and COE-HPCL to provide requisite support for gathering relevant information.
5. 'SMEA' shall actively participate and co-ordinate with other parties to the MoU in developing & executing the project.
6. 'SMEA' shall actively participate and co-ordinate with other parties to the MoU in execution and validation of the Model.
7. 'SMEA' will designate an employee who will be the In-charge of the liaising with other parties to the MoU and also support in internal administrative activities of the project.

### COE-HPCL

1. COE-HPCL shall designate a faculty as 'Principal Technology officer' who shall be the primary coordinating authority for the project.
2. The Principal Technology officer shall identify the 'Co-Technology officer and segregate the various modules/segments of the project ( multiple research projects designing the models and pilot execution etc.), assign teams, develop schedules and monitor the management of overall project.
3. The Principal Technology officer shall also be in charge of the liaising with the other Parties to the MoU and also support in internal administrative activities of the project.
4. Principal Technology officer shall constitute Research team(s) to gather relevant information from MSME units identified by SMEA. The Research team shall conduct





- relevant analysis on the information gathered and shall provide summary findings in a report form.
5. The Principal Technology officer, through a consultative process, with other Parties to the MoU shall identify or select internal and external resource personnel whose services are required in designing and developing Revival and Rehabilitation Models, Pilot Level Implementation, Testing and Modifications, if any.

### **PAYMENT TERMS**

Under this MoU, the Principal Investigator designated by the Executing Authority shall identify and segregate various modules/segments of the project culminating in achieving overall project objectives.

A detailed work plan and schedule of payments shall be prepared and presented by the Executing Agency for each part (PART A and PART B) of the project to the Monitoring Committee which shall duly verify and approve the proposed work plan and payment terms.

In the first year of Project Duration, amount of Rs.50000 shall be released by SMEA based on submission of work plan and pilot model with 60days of above Milestone. SMEA is responsible for releasing balance amount in the second year of project duration after submitting the agreed deliverables.

Separate Account statements shall be maintained for this purpose.

### **OTHER CLAUSES**

#### **1. EFFECTIVE DATE**

Both the parties agree that the MoU shall take effect from 25<sup>th</sup> August 2019 and shall continue to be in force till termination or till the project ends.

#### **2. EXCLUSIVITY CLAUSE**

The project shall be an exclusive joint undertaking of COE-HPCL, GRIET and SMEA.



7  P Desai

It is expressly agreed that none of the parties shall undertake this project separately outside of this MoU either individually or in collaboration with any other individual or institution.

### 3. TERMINATION

This MoU shall be valid and remain in force for a period of two years from the date of starting. It may be extended for a further period with mutual consent of the parties without further funding or if funds is required, has to be discuss at the end of 1<sup>st</sup> year. Both parties agree to perform their obligations in good faith and to the best of their ability in order to meet this timeline.

The MoU shall continue to be in force till the time where the parties to the MoU have not discharged their obligations pursuant to the terms mentioned herein.

However, this MoU stand terminated if specifically superseded by any agreement/MoU entered subsequent to the date of this MoU. This MoU may be terminated other than by mutual agreement and with a notice of two month due to occurrence of an Event of Default as mentioned in Clause 6.

### 4. CONFIDENTIALITY AND DATA

The parties must not disclose any proprietary or confidential information relating to the MSME units under study or the findings of the Assignment including any of the records/documents generated during the process of assignment, if any without the prior written consent of the Monitoring Committee.

The Final Report and all other materials collected and developed in connection with the assignment shall be the joint property of both the parties of this MoU. The intellectual property such generated will be property of SMEA.

### 5. EVENTS OF DEFAULT

The following events will constitute Events of Default:

- Failure to fulfill roles and responsibilities by the parties beyond reasonable period of time.
- Violation of Confidentiality Clause.

*Signature*

*Signature*

6. THE UNDERSTANDING

This MoU supersedes any prior written or oral agreements between the parties in relation to the subject matter. Changes and amendments to this MoU shall have effect only if made in writing and signed by the parties.

7. GOVERNING LAW, DISPUTE RESOLUTION and JURISDICTION

All disputes, differences and/or claim arising out of or touching upon this MoU, by way of arbitration in accordance with the provisions of the Arbitration and Conciliation Act, 1996. For all legal proceedings, not legally amenable to Arbitration, the Jurisdiction shall be the courts at the city of Hyderabad.

IN WITNESS WHEREOF the parties here to have set their hands in the presence of witness at Hyderabad on the day month and year first above the mentioned.

*Janathy*

DIRECTOR GRIFT  
[FIRST PARTY]

*N. 1 Dec*

[SECOND PARTY]

PRINCIPAL INVESTIGATOR

*G. K. JMD G. K. K. Lakshmi Redi Redi CSE  
20 Jan 2011 20 100*

CO-PRINCIPAL INVESTIGATORS

1. *S. Bhargava, IAS - S. Bhargava, IAS, Asst prof CSE, 20 Jan*

2. *(Y. Krishna Bhargava, Asst prof - CSE, 20/1/11)*

DHI

# DREAM HOME INTERIOR

CITIZEN HOSPITAL,SERI LIMGAMPALLY ,HYD-54

INTERIORS

URL:www.dreamhomeinterio.com E-Mail: dreamhomeinterio1@gmail.com

Dt: 22.12.2018

To,

Dr. K.Madhavi  
Professor, CSE Department,  
Gokaraju Rangaraju Institute of Engineering & Technology,  
Bachupally, Hyderabad 500090.  
Telangana, INDIA.

Kind Attn: Principal, GRIET

Sub: Work order for Detailed Consultancy Services for the Following Work :

Ref: Your Project Proposal dt: 22.12.2018 **Website Design and Maintenance**

Dear Sir/Madam,

In line with the discussions that we had, we are pleased to confirm you our work order to carry out the Engineering Services for the works mentioned under subject. You are requested to please treat this a Letter of Acceptance (LOA) with the entrusted work as per the details stated below:

**Deliverables:**

Implementation and maintenance of website, Provide progress report to client

We hereby accept your financial proposal of **Rs. 30,000/-** (Thirty thousand Rupees Only). Kindly send proforma invoice and bank details for further process. Time period for the project is 2.5 months from LOA issue date and maintenance is for 12 months.

*Aziz*

Regards  
Dream Home Interior  
Chandanagar Nagar, Hyderabad



# GOKARAJU RANGARAJU Institute of Engineering and Technology

(Autonomous)  
Approved by AICTE, New Delhi - Permanently affiliated to JNTUH, Hyderabad  
Accredited by NAAC with 'A' grade

Mr.G.Santhosh Kumar  
Assistant Professor  
CSE Dept.  
GRIET  
Hyderabad

Date of Invoice 21-08-2019

## INVOICE

### Customer Details

Name Nature Consciousness Centre  
Address Madhapur  
City Hyderabad  
Place of Supply Telangana  
PIN 500028  
Phone 9866694368  
GSTIN/UIIN

No.	Description	Qty	Rate (Rs.)	TOTAL
1	Website Development	1	10,000	10,000
			Sub Total	10,000
			Total	10,000
Total Amount in words to be paid : (Ten Thousand Only)				10,000
Amount Received				10,000

Thank you for your business with CSE Dept , GRIET

**Signature**  
**DR. K. MADHAVI**  
B.E., M.Tech., Ph.D  
Professor and HOD  
Computer Science and Engineering  
Gokaraju Rangaraju Institute of Science and Technology  
HYDERABAD-500 090.

Bachupally, Kukatpally, Hyderabad - 500 090, Telangana, India  
Cell : 7207344440 / 7207714441 e-mail: info@griet.ac.in, www.griet.ac.in