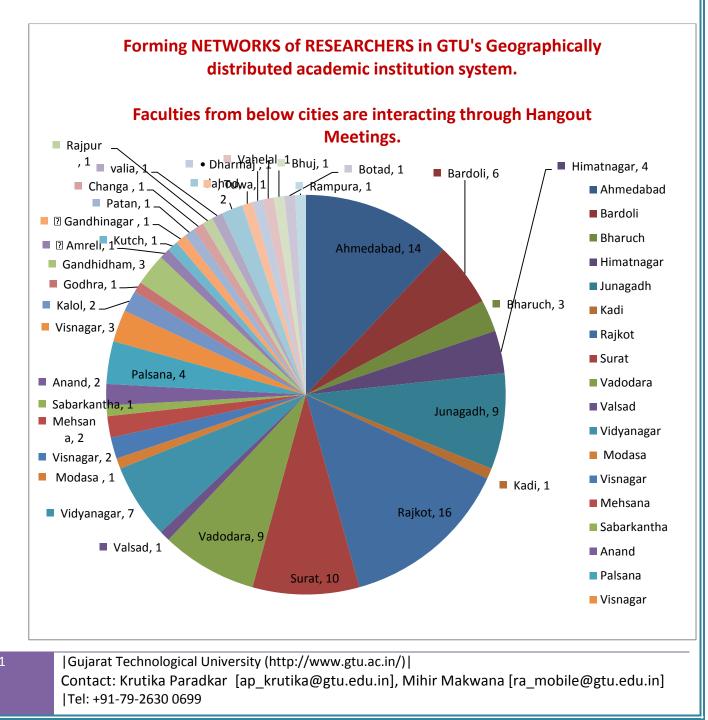
# GUJARAT TECHNOLOGICAL UNIVERSITY

# **NETWORKS of RESEARCHERS at GTU**

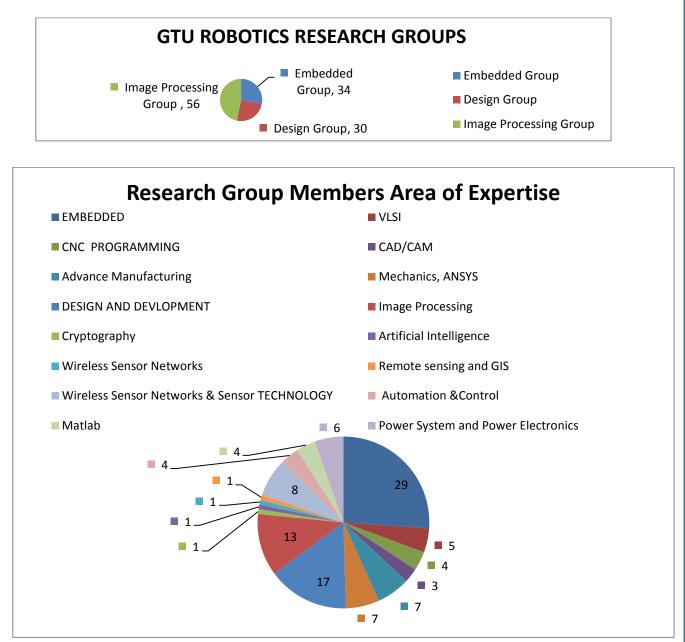
**Report of Robotics Research Group Meetings** 

# **OBJECTIVE OF THE GOOGLE HANGOUT MEETINGS:**

Gujarat Technological University (GTU) has around 17,000 faculties working across Gujarat at its affiliated institutes. Bringing these faculties on one platform for a brainstorming or a meeting is a great challenge. GTU research groups has started organizing regular meetings using Google Hangout tools to develop effective communication and supporting Research through Networks. GTU has established **GTU ROBOTICS RESEARCH GROUP** for faculties interested in advance robotics research and are bringing them together on one platform to explore common areas of interest. (<u>http://www.gtu.ac.in/circulars/15Jan/17012015 03.pdf</u>)



GTU Robotics Research Group is divided in three sub group 1. Embedded 2. Design and 3. Image Processing. The following 3 Google Hangout meetings were organised for faculties who have an interest in various areas as a part of this initiative. Mr. Naresh Jadeja Deputy Director-GTU shared the vision of Honourable Vice Chancellor of GTU **Dr. Akshai Aggarwal** for forming Robotics Research group networks. These meetings were coordinated by Prof. Krutika Bhagwat Partaker & Mr. Mihir Makwana



All **three** meetings started with the Introduction of group members which are from **EMBEDDED**, **DESIGN** & **IMAGE PROCESSING** background and their current activities in related research field. They discuss technical innovation & activities they did. They shared their ideas about what further activity they want to do in Robo Research Group. These meetings were followed by faculties providing feedback form.

|Gujarat Technological University (http://www.gtu.ac.in/)| Contact: Krutika Paradkar [ap\_krutika@gtu.edu.in], Mihir Makwana [ra\_mobile@gtu.edu.in] |Tel: +91-79-2630 0699 Mr. Naresh Jadeja shared vision of Honourable Vice Chancellor for forming Robo research networks, CIC3 LAB & E-library and asked Faculty Members to start interacting with one other to take lead in the Robo Research. He explained the concept of Hub and Spoke model being followed at GTU and how GTU plans to encourage Research through Networks. Mr. Naresh Jadeja also gave information about GTUs indigenous **ROBO SOCCER** and **CLEAN INDIA ROBORT** competition for Central Techfest.

# **1) EMBEDDED GOOGLE HANGOUT MEETING**

# (Date: 4 Feb, 2015. 4 pm to 5 pm)

GTU Research group has 34 experts working in embedded systems from all across Gujarat. Following suggestions were received from these experts during and after Google Hangout meetings.

#### Prof. Kinnar Vaghela from GEC Modasa

"Would like to be a part of team to make a good robotics platform for gtu students."

• He shared his experience in Embedded Systems.

#### Prof. Anish Vahora from Bvm Engineering College, Vallabh Vidyanagar

"Would like to guide student about how to make robot and also give idea about innovation in robot."

• He suggested innovation in robot using speech and image processing.

# Prof. Satyadev Vyas from Ahmedabad Institute of Technology , Ahmedabad

"Let us have face to face meeting of the groups also to share lots of practical experience and then we can work out next step."

- He asked to arrange workshop on LAB VIEW in CIC3 .
- Prof. Virendra A Patel from Bhagwan Mahavir College of Engineering And Technology, Surat "We shall keep Expert Lectures for the students and also take students to R&D set up to help them see what kind of work is currently going on."
  - He shred his knowledge about Navigation, under water Robotics & GPS.

He also shared projects which he did in Institute of Plasma Research & DAVinci DSP Processor and SFF-SDR Board at CSIR-CEERI, Pilani & his Trainnig in DST Inspire Programme at IIIT, Pune.

# > Prof. Manish Patel from Grow More Faculty of Engineering, Himmatnagar

"Would like to help the student how embedded system play role in robo & develop Android App, Design of Tap & Bist"

- He suggested to make students aware about available platform & latest technology.
- > Prof. Patel Rahul from Sankalchand Patel College of Engineering , Visnagar
  - |Gujarat Technological University (http://www.gtu.ac.in/)| Contact: Krutika Paradkar [ap\_krutika@gtu.edu.in], Mihir Makwana [ra\_mobile@gtu.edu.in] |Tel: +91-79-2630 0699

"Would like to design something that will help/benefit the society like to design a machine to help physically disable peoples, to support/assist security like metal detector with camera and other amenities, quad-copter, Maze-solver robots, etc. Design something that attract student's interest like swarm robotics for playing any game, etc. "

• He had given idea on swarm robotics for playing any game.

# Prof. Nilesh Devani from Amrut Institute Junagadh

" let's go for face to face meeting of all embedded/robotics group members. Also start consultancy so work starts and learn something good."

• He suggested consultancy approach.

#### Prof. Rakholiya Hiamsnhu from SSASIT surat

" Wants to show various robotics project that already done & then Decide what we require to do robotics activity & also to Encourage student in this activity and do Automotive work to help society through robotics "

• He wanted to make students technically sound which will be helpful to our nation.

#### > Dr Mihir V Shah from VGEC chandkheda

"Wants to make GTU a LEADER in robot research area. Because ten years down the line India will become a robot leader and to make our country authority in robotic research like IT innovation, different untouched areas of industry , household , medical field and even education can be explored with keeping robotics research in mind. He has guided students in implementation of innovative ideas in CIC3 lab"

#### Dr Dipesh Kamdar from VVP Engineering College, Rajkot

"Wants to Prepare each student to understand robotics and Atomization in such a way that everything should be made in India"

# Our other Embedded Robo Research group members are -

- Prof. Viral Patel From Parul Polytechnic Institute, Vadodara
- Prof. Pritesh Kukadia From ITM Universe, Vadodara
- Prof. Himanshu Patel From Parul Polytechnic Institute, Vadodara
- Prof. Vinay Viradia Chandubhai From S Patel Institute Of Technology, Changa
- Prof. Joshi Yogesh From Om Institute Of Engg & Tech Junagadh
- Prof. Hiten Mochi From RMS Polytechnic, Vadodara
- Prof. Krunal From Laxmi Institute Of Technology, Valsad
- Prof. Ravin Sardhara From V.V.P. Engineering College, Rajkot
- Prof. Nirmal Bhalani From V.V.P Engineering College, Rajkot
- Prof. Viral Metaliya From V.V.P Engineering College, Rajkot
- Prof. Jayesh Chauhan From V.V.P Engineering College, Rajkot
- Prof. Patel Divyeshkumar Sureshkumar From SCET, Kadi
- Prof. Jayesh Diwan From Indus Institute Of Engineering, Ahmedabad

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- Prof. Sahejad S. Shaikh From FETR, Bardoli
- Prof. Priyank V. Patel From Faculty Of Engineering Technology & Research, Bardoli
- Prof. Prof. Hiren R.Raotole From Bhagwan Mahavir College Of Management-MCA, Surat
- Prof. Parth Mehta From Leads Institute Of Tech. & Engg, Bharuch
- Prof. Tanmay Vyas From Noble Engineering College, Junagadh
- Prof. Roshini From V.V.P Engineering College, Rajkot
- Prof. Devang Shah L J Institute Of Engg. & Tech , Ahmedabad
- Prof. Sunil Paryani From G. P. Himatnagar
- Prof. Anju Murlibhai Vasdewani From V.V.P. Engineering College, Rajkot

# 2) Design Google Hangout Meeting of Robotics Design Research Group

(Date : 5 Feb, 2015. 4 pm to 5 pm)

GTU Robotics Research group on Design has 30 experts working in embedded systems from all across Gujarat. Following suggestions were received from these experts during and after Google Hangout meetings.

# Prof. Pankil H Vakani from T F G Polytechnic , Gandhidham "Expressed his plans to do research on different pneumatic system related to robo."

- Prof. Harin from Bhagwan Mahavir College of Engineering and Technology, Surat "Wants to share my research on virtual robotic simulation, path optimisation and robot work cell design."
  - He discussed about his design of vertical glass cleaning robot model.

# > Prof. Harshit Bhavsar from SAL college of Engineering, Ahmedabad

"We have to find interested students in robotics field and invite them to GTU for workshops of expert lectures for one day, so Faculties and students can share their knowledge."

- > Prof. Sachin Devmurari from Arun Muchhala Engineering College, Amreli
  - He suggested to do physical group discussion on improvising Industrial robots limitations and Robo human interactive programs & also added to join this network to know artificial intelligence.
- Prof. Rakesh Oza from Gujarat Power Engineering and Research Institute, Mehsana "Wants to guide to students in field of Design, Mechanics. Wants to Increase interaction among members in field of CNC part programming "
  - He suggested to introduce Hands on workshops.
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#### Prof. G V PATEL T F G Polytechnic - Adipur(Kutch))

• He wanted to contribute in Mechanical design and programming aspect.

#### > Prof. Krunal Gandhi from Gandhinagar Institute of Technology, Gandhinagar

"Wants to work on automation & Robotics and make feasible to student make project on same"

• He asked to everyone to finalize one agenda and start working on automation in robo recherch group for students and share with group about its development.

#### Prof. Patel Jaykumar from R.C.T.I. Ahmedabad

"Wants to contribute in the field of robotics sensors"

Prof. Priyam Parikh from SAL college of Engineering, Ahmedabad "Want to make students technically sound...Which will be helpful to our nation"

#### Our other Design Robo Research group members are

- Dr.Ramdevsinh From Marwadi Education Foundation Group Of Institution, Rajkot
- Prof. Arvind Sankhla From SPB Patel College Of Engineering, Mehsana
- Prof. Mandar Sumant From Babaria Institute Of Technology , Vadodara
- Prof. Niraj C. Mehta From Vadodara Institute Of Engineering, Vadodara
- Prof. Nirav Patel From Sabar Institute Of Technology For Girls, Sabarkantha
- Prof. Patel Priyal Ramanbhai From Sardar Patel College Of Engineering , Anand
- Prof. Dhaval A Patel From Sankalchand Patel College Of Engineering, Visnagar
- Prof.Abhishek Makati From Om Engineering College Junagadh
- Prof.Avdesh Kumar Sharma From Engineering College Tuwa, Godhra
- Prof. Jasmin From V. V. P. Engineering College, Rajkot
- Prof. Hardik Khunt From V. V. P. Engineering College, Rajkot
- Prof. Nirav Doshi From Marwadi Education Foundation, Rajkot
- Prof. Viren J Patel From GEC, Dahod
- Prof. Mehul Modh From LCIT , Visnagar
- Prof. Kumbhar Manoj From Swaminarayan College Of Engg.& Technology, Kalol
- Prof. Sonu S Bhagat From J. H. Desai Polytechnic, Palsana
- Prof. Hardik B Dhimar From J.H.Desai. Polytechnic College Palsana
- Prof. Sudhir D Devganiya From J.H.Desai. Polytechnic College Palsana
- Prof. Jatin M Patel From Gandhinagar Institute Of Technology, Gandhinagar
- Prof. Jaimin B Patel From Vadodara Institute Of Engineering, Vadodara
- Prof . Yashavantkumar From A D Patel Institute Of Technology , Vallabh Vidhyanagar
- Prof. Rakeshkumar From Government Polytechnic, Ahmedabad

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# 3) Image processing Google Hangout Meeting

(Date : 6th Feb, 2015. 4 pm to 5 pm)

GTU Research group has 56 experts working in embedded systems from all across Gujarat. Following suggestions were received from these experts during and after Google Hangout meetings.

- Prof. Manisha Mehta from KDP, Patan
  - She suggested to integrate E-yantra project with GTU.
- Prof. H M Nimbark Director of OM Engineering College , junagadh

"Wants to contribute in the field of Artificial Intelligence"

- He liked to say Industrial or Practical Approaches need to be Reach to Students.
- Prof. VIRADIA VINAY P from Chandubhai S Patel Institute Of Technology , Changa "Wants to Innovate New Technology in ROBOTICS Automation."
  - He discussed to Implement new initiative that make ROBOTICS more Advance and More Automatic & to Innovate New Technology in ROBOTICS Automation.
- Prof. Tank Pareshkumar Mohanlal from B & B Institute of Technology, Vallabh Vidhyanagar "I want to do research related to video processing. In that, specifically to find out moving objects and it's trajectory from video captured from stationary and non-stationary cameras"
- Prof. Meet Shah from LJIET
  - He suggested to make this group in each and Individual College.
- Prof. Utkarsh from Silver Oak College of Engineering & Technology
  - He wants to mentor the students.
    <u>Our other Image Processing Robo Research group members are</u>
  - Prof. Sampan Shah From L.D.College Of Engineering, Ahmedabad
  - Prof. Pragnesh Gandalal Patel From Saraswati College Of Engineering, Rajpur
  - Prof. Robinson Paul From BVM Engineering Collge
  - Prof. Sudhirkumar Jagadishbhai Patel From D.L.Patel Inst. Of Mgt & Tech Mca College, Himatnagar
  - Dr. Mina Talati Shroff From S R Rotary Institute Of Chemical Technology, valia
  - Prof. Saifee Kanjetawala From Babaria Institute Of Technology, vadodara
  - Prof. Patel Priyal Ramanbhai From Sardar Patel College Of Engineering , Aanad
  - Prof. Dhaval A Patel From Sankalchand Patel College Of Engineering, Visnagar
  - Prof. Afzal A. Gudala From GEC , dahod
  - Prof. Brijesh Garala From Om Engineering College Junagadh
  - Prof. Paresh Modha From A. D. Patel Institute Of Technology, New Vidyanagar
  - Prof. Milind Kansara From Faculty Of Engineering Technology & Research, Bardoli
  - Prof. Pradeep Navinbhai Patel From Government Engineering College, Gandhimagar
  - Prof. Dhaval From VIMAT , surat
  - Prof. D. A. Divrania From Om Engineering College, Junagadh
  - Prof. Ikrammalek From Engineering College, Tuwa
  - Dr Dipesh Kamdar From VVP Engineering College, Rajkot

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- Prof .Ajish Samuel From Jayvantrai Harrai Desai Polytechnic, Palsana, Surat
- Prof. Kania Vipul S. From Jayvantrai Harrai Desai Polytechnic, Palsana
- Prof. Pratikkumar Dalpatbhai Solanki From Faculty Of Engineering Technology & Research, Bardoli
- Prof.Sanket R Trivedi From Narmada College Of Computer Application, Bharuch
- Prof.M. J. Patel From Grow More Faculty Of Engineering, Himatnagar
- Prof.Ankita Rana From GEC, Surat
- Prof.Himanshu Gajera From Om Engineering College, Junagadh
- Prof.Nimesh Patel From MEFGI, Rajkot
- Prof.Viren J Patel From GEC, Dahod
- Prof.Krunal Shantilal Dhimmar From Fetr, Bardoli
- Prof.Rohit Tiwari From Kjit, Savli
- Prof.Vrajesh D Patel From Ipcowala Institute Of Engineering & Technology- Dharmaj
- Prof.Piyush R. Patel Swaminarayan College Of Engg. & Tech. Saij,Kalol
- Prof.Sagar Patel From Sardar Patel College Of Engineering
- Prof.Paras From Marwadi
- Prof. Nilrajsinh From Hasmukh Goswami College Of Engineering, Vahelal
- Prof.K. S. Manek From G P Bhuj
- Prof.Shilpa Parmar From Lj Institute Of Engineering And Institute, ahmedabad
- Prof. Anand Joshi From G.H.Patel College Of Engg And Tech, V.V.Nagar
- Prof. Alpesh Chauhan From KJIT Savli
- Prof. Jabbar Kureshi From L.D.College Of Engineering, Ahmedabad
- Prof. Hardik M Pandya From V.V.P. Engineering College, Rajkot
- Prof. Dhaval B Patel From Gandhinagar Institute Of Technology, Gandhinagar
- Prof. Niraj Pankajkumar Trivedi From Christ Polytechnic Institute, Rajkot
- Prof. Kalpesh Parmar From Shri J M Sabva Institute Of Engineering & Technology-Botad
- Prof. Sachin Patel From B Pharmacy College ,Rampura
- Prof. Hina Khuman From Leads Institute Of Technology & Engineering. Bharuch
- Prof. Jayati Doshi FromV. V. P. Engineering College, Rajkot
  Prof. Milind From VGEC Chandkheda, Prof. Dhimmar Krunal S from FETR, Bardoli,
  Prof. Ajish Samuel from Jayvantrai Harrai Desai Polytechnic ,Palsana, Surat, Prof.
  Dhiru A. Divrania from Om Engineering College, Junagadh. & Prof. Patel Priyal R from
  Sardar Patel College Of Engineering, Mehsana

The researchers and Faculty members who want to join this GTU's Robotics Research group may register at the following link. <u>https://docs.google.com/a/gtu.edu.in/forms/d/1Pi1EDTRk4-</u> xnwHREelCRgRkzqozAodiBiDBUsrcORmw/viewform