

GTU INNOVATION COUNCIL

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COUNCIL

Endeavours of GIC

Zonal Centre, Rajkot

Venue:

GTU Innovation and Start-up Centre – Rajkot Hub, AVPTI Campus,
Opp. Hemu Gadhavi Hall, Tagore Road, Rajkot - 360001

**Gujarat
Technological
University**
(GTU)

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Introduction

Under the visionary leadership of Hon' Vice Chancellor **Dr Navin Sheth** and **Honorary Director Mr Hiranmay Mahanta**, GTU Innovation Council has started zonal centres at **Rajkot, Surat and Vadodara** to support and nurture Innovations and Start-ups within the University community. It has been designed to act as a catalyst of change for the society.

As per the latest address by **Hon'ble PM Narendra Modi** (at Smart India Hackathon 2018), Innovation is the driver for the nation's growth and key to faster growth lies in completing the cycle (he) termed as 'IPPP'- Innovate, Patent, produce and prosper !

Innovation and Entrepreneurship are off the track movements, which requires right kind of culture and ecosystem to grow and sustain. Even the first step of problem identification is not that simple, for instance, it is important to start with identifying and articulating a specific problem that one will address. When one is able to identify unique gap, which is when a focused solution to that problem will emerge. This gap identification must be backed by data and research. Once there is complete understanding of the underserved need one is trying to address, only then one can design the best possible solution for that context.

GTU Innovation Council is putting its best efforts since 2011 in aligned with 'IPPP' model. Design Thinking, Patent Clinic, and Student Startup Support System to name a few!

The zonal centres are thus created to penetrate more in the state and maximum people can be benefitted in the era of innovation and entrepreneurship.

Saurashtra zone centre, located in AVPTI Campus, Rajkot was recognized on 27 September, 2017, very much in the city area and easily accessible, spanned over 3511 sq. feet and with facilities like Activity area, co-working space, and conference room and computer lab.

Since it got operational from December 2017, Rajkot centre has been active with bunch of activities and events and here are some glimpses of the same.

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Inaugural Ceremony

13 Oct, 2017

On this occasion, Dr Sachin Parikh (Dean, GTU), Dr Dilip Ahir (Dean, GTU), Dr G M Vala (Principal, GEC Rajkot) Dr P P Kotak (Principal, Govt. Polytechnic, Rajkot), Dr J R Chavda (B.K.Mody Government Pharmacy College, Rajkot) were present in the Rajkot Regional Hub

Dr Sachin Parikh (Dean, GTU) conveyed message of **Honourable Chief Minister of Gujarat, Shri Vijaybhai Rupani** as follows “under the visionary leadership of Shri Narendrabhai Modi, honorable Prime Minister of India, the purpose of setting up GTU was to keep pace in the era of innovation, invention and application of ever evolving technology. Gujarat has taken its first step towards development; the movement has become multi-dimensional and included all the scopes of life. It explored almost all the possibilities. I am pleased to learn that the GTU is launching the much needed GTU Innovation and Start-up simultaneously at Surat and Rajkot. I am sure the Centres will be instrumental in finding, promoting, highlighting and encouraging the youth power of GTU students and inspire many potential youth. My best wishes to the GTU for the grand success of the Gujarat Start-up Ecosystem in the days to come.”

Shri K.K. Nirala, Director of Technical Education – Gujarat said in his message that, “Government of Gujarat is implementing new strategies to promote innovations. GTU is taking nice initiative in the direction. We believe that an ecosystem should be developed so that all students get benefitted. The need of the hour is, all innovative ideas must be encouraged to convert with the help of lab arrangement. For creating such an environment, we must leverage the support of faculty members too. Our many students are having immense potential. GTU is starting Centres in Surat and Rajkot in First phase and next such centre will be coming up in Vadodara. These Centres will be helpful to students to develop a prototype and commercialization of their innovative ideas. Physical facilities as well as mentoring facilities will be available at these Centres. There will also be Patent and IPR knowledge sharing available. We hope whole environment to be created will make our education more vibrant. GTU in association with the Gujarat, Department of Education, and these Centres will become major hub of start-up and innovation related activities.”

Prof. (Dr) Navin Sheth, Vice Chancellor of GTU has expressed thanks to the Government of Gujarat and Department of Technical Education for providing space and facilities.

Dr Pankajrai Patel and Dr Sachin Parikh have described the journey till now from the commencement of Innovation and Startup hub on respective zone and how GTU has worked on Startup India -Stand up India, Digital India and Make in India. Idea behind to open Regional Hub for Innovation and Startup.

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Parth Sejpal Asst. Professor, Design Engg., GIC Team explained **9 Pillar** (Eco-System, Open School of Design, Community Innovation & Co-Creation Centre, IPR, S4, Pre-Incubation, Incubation, ICT Platform, Policy Intervention, Skill Market Linkage) of GTU Innovation Council and pipeline of Innovation to Startup, **Idea to Prototype, Prototype to Product and Product to Startup** and they also discussed the description of Major Activity heads and sub activity Heads of all Pillar of GIC via presentation.

Dr A S Pandya (Principal, AVPTI,Rajkot) concluded with the vote of thanks and requested all students and faculties to make maximum utilization of this Innovation and Startup regional hub to make their future bright.



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IPR Sensitization

8 Dec, 2017

GTU has successfully organized workshop on “Innovation and IPR” (Patent Clinic) at GTU Innovation and Start-up Centre – Rajkot on 8th Dec, 2017 - Friday. It's a unique initiative started by GIC to provide all possible assistance to students and faculty members from any branch of science or technology, to file patent and to start a start-up of its own for his/her innovative work or project.

Patent Clinic is a workshop in which GIC organizes seminars and workshops on basics of IPR/Patents, Patent Prior Art Search Techniques and its importance, Patenting System in India and hands on exercises to draft patents.

Patent searching through different online databases were conducted during this program. Participants were given hands on training of patent searching through various free (Open source software - GOOGLE PATENT, WIPO, ESPACENET and IP) As Well As Paid Databases (License Software - PATSEER). After an intensive exercise during the workshop about 80 participants found their queries, innovative and patentable and sensitized to file for provisional patents.



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3D Printing Session

23 Jan, 2018

In today's era of continuous innovation, 3D printing is a must know technology for innovators as well as for students, especially for those also who opt for trial and error method. It is the only tool which can create anything according to your idea and design within the shortest period of time economically. 3D printing is about how to make physical model of the hypothetical idea that is generated in our mind.

The workshop was on 23rd January, 2018 and inaugurated at 10:30 am, in presence of **Dr Jayman Upadhyay, Mayor, RMC, Rajkot, Dr Darshitaben Shah, Dy. Mayor, RMC, Rajkot, Mr. P. G. Shah, Manager, Government Press, Rajkot and Mr Divyeshbhai Soni, President, Jems and Jewellery Association, Rajkot.** Each of them delivered speech in the context of 3D printing and its importance to provide better opportunities in the field of innovation and employment. Around 160 students attended the workshop very enthusiastically. All of them were under graduates mostly from 4th and 6th semesters from different colleges of Rajkot Zone.

The first session was headed by Mr Keyur Punjani, who gave an overview of 3D printing technology including its history, various methods of 3D printing, its applications, its importance etc. It was a very interactive kind of session, students asked questions regarding the technology and Mr Keyur Punjani answered every question satisfactorily, what a kind personality he is!! With the help of 3D printer and explained about the kind of different processes applied on it to the other groups.

The third session was about live 3D printing on 3D printer in which Mr. Abhinav Yagnik created the GIC logo with the help of CAD file (made in Autodesk Fusion) after slicing it in the Cura software. Mr Keyur Punjani showed videos on future technologies, the areas where 3D printing will revolutionize the industrial market of additive manufacturing. He also showed one mind boggling video on 10 crazy things that can be 3D printed. He shared the statistical data about the market people who are using 3D printers with their names and kind of industries.

Mr Parth Sejal concluded with the closing remarks regarding the workshop and brief introduction about GTU associates.

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Dr. Jayman Upadhyay, Mayor, giving inauguration speech



Guest delivering speech regarding the workshop



Mr. Keyur Punjani explains the concept of 3D printer



Students learning 3D printing technology

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Session on FreeMind software

26 Feb, 2018

FreeMind is a free mind mapping application written in Java. FreeMind is licensed under the GNU General Public License Version 2. It provides extensive export capabilities. It runs on Microsoft Windows, Linux and macOS via the Java Runtime Environment. FreeMind is a mind-mapping application which allows a user to edit a hierarchical set of ideas around a central concept.

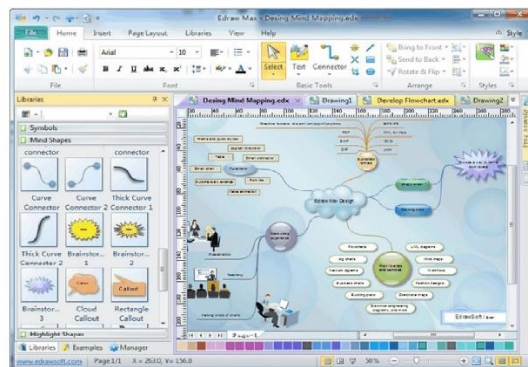
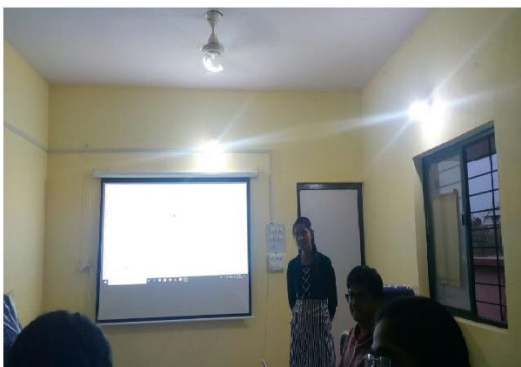
FreeMind was a finalist for Best Project in SourceForge.net's Community Choice Awards for 2008, which featured Open Source software projects.

Mr Parv Shroff and Ms Kamini Singh organized workshop about FreeMind on 26st February, 2018. They both are student associates at GIC.

Participants were given a hands-on approach on the most significant features of the application, likewise:

- Making icons on nodes
- Graphical links connecting nodes
- Web and file hyperlinks from nodes
- Folding branches
- Exporting Documents to PDF and open document
- Exporting images to appropriate formats
- Exporting hypertext to HTML and XHTML

In the concluding minutes a drill was planned where participants were asked to make a mind-map of their on any subject of their choice through FreeMind.



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eChai collaboration: 'Startup Hustle series in Rajkot

3 Mar, 2018

eChai which is an offline-online social network for entrepreneurship organized the event- 'Startup Hustle series in Rajkot'. The program series was simultaneously hosted in 20 cities of India by eChai, and GTU Innovation & Start-up Centre at AVPTI Campus co-hosted the Rajkot edition. 5 growth stage startups shared their hustle stories with the inquisitive and curious audience, their roller-coaster journey with successes and failures were truly inspirational. The esteemed speakers were Dharmesh Vyas- DhoomKharidi.com, Vishal Sarvaiya- Shree Ashwini Dyechem, Darshan Dashani- Tea Post, Tejas Jasani- The App Guruz and Ajit Nathwani- MV Synergy.

Founders' hustle stories were followed by panel discussion. And later, GTU startup enthusiasts were given the chance to share their seed stage experience. People took back home lot of inspiring stories ranging from startups with 20 Cr turnover to ideation and prototype stage startups.



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TiECON Exposure for Active GIC volunteers

9 Mar, 2018

Introduction:

TiECON- ‘Building Tomorrow, Today’ is one of the largest entrepreneurial conferences with the consideration to aggregate the entrepreneurs from the established economy with the new age economy. TiEcon provides the platform to network and learns from Industry Luminaries, VCs, successful entrepreneurs and experienced executives.

Our 5 associates from Rajkot zone were sponsored for this exposure.

Flow of Program:-

- Opening Remarks & Conference Introductions
- Howzzat!! Opening with Parthiv Patel
- Morning keynotes- The Quick Heal story
- Fantastic- Innovations in FinTech
- Industry 4.0- Future of Factories
- Big Data & Analytics- Hype vs. Reality
- Managing Start-ups in a VUCA World- A talk by Pramod Sadarjoshi
- Investor panel- Insights into Start-ups funding
- Story of Gujarat Exits, Rise of Digital Transforming Businesses
- Blockchain- Beyond Crypto Currencies
- Evening keynotes- Era of Exponential Innovations
- Closing Remarks & Vote of Thanks and finally Stand Up by Mayan Desai.



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Level Zero Scrutiny for SSIP

16 Mar, 2018

SSIP stands for Students Start-up & Innovation Policy. In 2010, the Gujarat Technological University (GTU) started an experiment to incentivise students academically. Under the experiment, the students were asked to identify a problem at any place, village, industry or organisation during their summer vacation. The experiment became popular among other universities in Gujarat as well. Gujarat Education Minister Bhupendrasinh Chudasma in association with Vice Chancellors of the University to form a state-level Student Start-up & Innovation Policy (SSIP). The policy was needed to create resources for start-ups, to support the mandate for Student Start-ups in the State. The idea is to provide a system to support pre-incubation phase of Entrepreneurship. GTU has been selected as SSIP enablers to promote and develop the culture of innovation and entrepreneurship. The process followed includes outreach to Saurashtra zone, best projects identification, pre-assessment process and then shortlisted entries were invited to provide venture and team details and their requirements to fulfil their venture's milestones.

Scrutiny of SSIP projects was done on 16th March, 2018 at GIC-Rajkot. In this Scrutiny all the participants came from different Institutes like Darshan-Rajkot, Atmiya-Rajkot, VVP-Rajkot, Gardi-Rajkot and OM-Junagadh. All participants filled the form of SSIP and explained their Innovations and why they need SSIP. There were 17 teams who pitched their ideas.



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eChai collaboration: 'Ease of doing start-up in Rajkot

7 Mar, 2018

eChai which is an offline-online social network for entrepreneurship organized the event- 'Ease of Doing Start-up'. The program series was simultaneously hosted in 7 cities of India by eChai, and GTU Innovation & Start-up Centre at AVPTI Campus co-hosted the Rajkot edition.

The 'Ease of Doing Start-up in Rajkot' had five significant tracks like legal & accounting, technology enablers, start-up tools, fundraising & last but not the least, sales. In the galaxy of speakers we had, Mr Jay Kamdar (CA), Mr Hitesh Popat (CFO, R K University), Mr Darshit Sheth (MD, Renova Life Sciences)

Mr Jay Kamdar explained various policies regarding the start-ups and tax exemptions for various domains in the early stage of the product launch. He also gave insights about what is Start-up and what is Start-up India. He explained very well sole proprietorship, partnership, LLP, PPP. He also explained the benefits of OPC – One Person Company.

Mr Hitesh Popat, CFO of R. K. University - which is an educational body with Incubation Centre open to all. He gave highlights of the legal compliances, company name, taxes, balance sheet, GST, partnership, why people love Pvt Ltd. Factory and employee laws & the importance of trademark patent. When the business goes above 20 lac, GST is applied, so people give/add another name to the company which spoils the reputation of the company. Just because of the urge of the money of the owner, CIBIL score and repo that the company has developed gets degraded.

Mr Darshit Sheth who did computer then law then MBA then worked in a telecom company at Bangalore and finally got into a pharmaceutical business which has the turnover in crores named as RenovaLifeSciences. He introduced us that what is Formulation and Development (F&D). He also briefly told the market size of ophthalmology, cosmeceuticals, and nutraceuticals. He also explained about in-licensing and out-licensing. He shared his experiences with the Citizen Cooperative Bank, State Bank of India, Axis Bank and Small Industries Development Bank of India (SIDBI).

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Mr. Jay Kamdar



Mr. Hitesh Popat



Mr. Darshit Sheth

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Session on Mathcad software


26 Mar, 2018

Mathcad is computer software primarily intended for the verification, validation, documentation and re-use of engineering calculations. First introduced in 1986 on DOS, it was the first to introduce live editing of typeset mathematical notation, combined with its automatic computations.

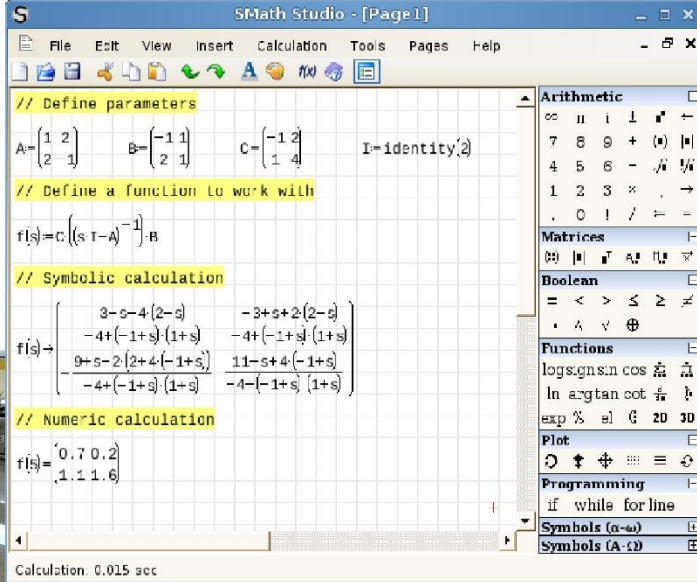
Mathcad is oriented around a worksheet, in which equations and expressions are created and manipulated in the same graphical format in which they are presented (WYSIWYG) - as opposed to authoring in plain text, an approach later adopted by other systems such as Mathematica and Maple.

Mathcad is part of a broader product development system developed by PTC, and often utilized for the many analytical touch points within the systems engineering processes. It integrates with PTC's other solutions that aid product development, including Creo Elements/Pro, Windchill, and Creo Elements/View. Its live feature-level integration with Creo Elements/Pro enables Mathcad analytical models to be directly used in driving CAD geometry, and its structural awareness within Windchill allows live calculations to be re-used and re-applied toward multiple design models.

Mr Sufyaan Sidatar and Mr Prakhar Upasani organized workshop about MathCad on 26th March, 2018. They both are student associates at GIC. 26 students attended the session.



ptc
Mathcad



The screenshot shows the Mathcad Studio interface. The main workspace contains the following code and results:


```
// Define parameters
A = [ 1 2 ]   B = [ -1 1 ]   C = [ -1 2 ]   I = identity(2)
    [ 2 -1 ]   [ 2 1 ]   [ 1 4 ]

// Define a function to work with
f(s) = C * ((s * I - A)^-1) * B

// Symbolic calculation
f(s) = [ 3-s-4(2-s)   -3+s+2(2-s) ]
        [ -4+(-1+s)(1+s)  -4+(-1+s)(1+s) ]
        [ 9+s-2(2+4(-1+s))  11-s+4(-1+s) ]
        [ -4+(-1+s)(1+s)  -4+(-1+s)(1+s) ]

// Numeric calculation
f(s) = [ 0.7 0.2 ]
        [ 1.1 1.6 ]
```

Calculation: 0.015 sec



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Video Explanation

31 March, 2018

As a part of peer drillⁱ, GIC is trying to develop culture of peer learning. It provides them a stage to showcase their skills, and it is very easier for others to grasp faster and better from their fellow mates. Also it helps students to get good grip over stage presentations and improve their communication skills. To start with, we are conducting video explanations (videos which revolves around innovation and entrepreneurship) wherein students explains the core content of the video they have been assigned and what they understood and how it inspired them, along with why one should watch it. Two videos covered were:

Video 1: TEDxBigApple | Reverse Innovation | Vijay Govindrajan

Video 2: Secret History of Silicon Valley | Steve Blank

Mr Parv Shroff, student associates at the centre concluded the evening with sensitization of centre activities to new-comers



ⁱ Peer Drill/Peer Learning essentially refers to students learning with and from each other as fellow learners without any implied authority to any individual, based on the tenet that “Students learn a great deal by explaining their ideas to others and by participating in activities in which they can learn from their peers”

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Report till March 31st, 2018

Report documentation, editing and compilation courtesy:

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