



STAB 2014-15 VISION

Rahul Prajapat

OVERALL CO-ORDINATOR Students' Technical Activities Body



Overall Coordinator

Rahul Prajapat
Overall Coordinator



Vision:

Looking at it from a broad perspective, there are three major elements in the vision team has set up for this year:

- a) To contribute to society and industry by making use of technology
- b) To promote technical hobby hands on activities in the institute, and
- c) To launch a knowledge sharing platform on national level

Through Technovation projects and unification of technical teams, we should aim to develop indigenous technologies in order to contribute to society and Indian industrial development. Problems statements can be procured from professors of the core engineering departments, CTARA, NGOs like honeybee networks and also may be through some kind of collaborations with industries and government institutions like CSIR labs, National Innovation Council of India etc. Involving IIT Bombay alumni working in manufacturing industries through SARC and the IDC community to handle design aspects of project will help us in achieving this objective. STAB should promote hobby activities by organizing more informal events in order to inculcate the 'club culture' prevalent among other genres, and to promote awareness towards technical activities in the students. These informal events include:

- Open activities on the lines of the piano stairs event, e.g. contraption and hologram events
- Day-long hardware hackathons, where students will come up with fascinating projects by working on the application layer of available resources such as Kinect and Leap Motion sensors among others
- Week long exciting "Tech on" projects such as spoke POV, Object Locator, home automation products, electronic posters to name a few

We have a myriad of technical content available on our Wiki page, like ITSP project documentation from previous years, workshop slides and various tutorials. I will properly organize it and will add more content to it. The main motive behind this is to create an online knowledge sharing platform on the lines of NPTEL in order to make this content accessible to all regional and national engineering colleges of India through the CDEEP community.

Lastly, STAB should aim to organize rigorous high-tech workshops on the lines of the MIT Media Labs Health Tech Workshop for seniors and PG students. Team will need your full support in achieving all these agendas. Keep the Tech Flag High.

Electronics Club

<http://stab-iitb.org/electronics-club/>

Vision:

Current scenario: Majority of the club activities are focused on freshmen. Main issue with senior participation is that they have not been able to relate themselves with the sessions that are planned keeping them in mind.

- Improve the participation of PGs in the club activities
- Increase involvement of seniors through informal meets and try to get product level outputs (which could be considered for patents)
- Give a purpose to each and every learning session that is organized
- Increase the "club-feeling"

Initiatives:

- Think and Tinker (TnT) sessions where interested people get together to conceptualize the idea that has been discussed on google groups or meetings.
- Electronic weekend (mainly) for postgraduates.
- A week long workshop where we brainstorm on technical solutions for social problems (pre-decided theme) and come-up with a working prototype by the end of it.
- 'Techify your room': This will be a kind of follow-up for the sessions we organize
- Flagship project: Development of a μ C board and developing an open-source community surrounding it inside IITB

Club projects (As of now):

- L293D tester
- RF module
- Flagship project

Riddhish Bhalodia Manager



Ankita Pasad Manager



Conveners:

Aditi Taneja

Atish Aloor

Deepak Goyadi

Pradyot Prakash

Pranav Jain

Rishabh Gupta

Yash Sanghvi

Titto Thomas (PG)

Ravindra Venkatesh (PG)

Robotics Club

<http://stab-iitb.org/robotics-club/>

Vision:

- To get a 'club feeling' within the students of IIT Bombay
- Increasing participation of all the Student's including PG's, not just freshmen in club
- Bringing out a product and not just a working model out of projects and other club events activities

Initiatives:

- Tech night
- Sophie Robotics' challenge
- 'How do they work' series- Interactive talk on various aspects of mechanical design and their application
- Theme based open discussion on topics related to robotics
- Fortnightly poster's various Technological development in Robotics'
- Tech talks by eminent personalities
- Float projects on real life problems and bring out a product or an idea to solve that

Chetan Agrawal
Manager



Vineetha Reddy
Manager



Conveners:

Rishabh Chaudhary
Kedar joshi
Madhur Maheshwari
Aditya Mate
Aishwarya joshi
Hardik Seth
Rushil Modi
Maithli Patel

STAB 2014-15 VISION

Web n Coding Club

<http://stab-iitb.org/web-and-coding-club/>

Vision:

While students in IIT Bombay learn programming in their first year, they usually drop it after that. One of our goals is to help these people carry on with programming and retain it as the useful skill it is. For the people who already program, we wish to maintain a community of programmers from all spheres and help people reach greater heights. We also have a focus on improving IITB's student participation in open source, thus increasing the institute's footprint and instilling a sense of giving back to the community.

Initiatives:

- Various introductory events for languages and frameworks
- Informal meetings every fortnight to help build a community
- Multiple hackathons to build new ideas and learn new frameworks
- Special sessions and an inter IIT competition based on open source contributions
- Sessions for increasing caliber in competitive (algorithmic) coding
- A large (funded) event in the winter to connect the wider Mumbai programmer community with the student community
- Freshman events like a Scratch day to ease new students into coding
- Structured, open sourced projects for students to try their hands at

Ranveer Aggarwal Manager



Manish Goregaokar Manager



Conveners:

Sarang
Abhijit
Shantanu
Rutuj Shah
Mouli
Shudhatma
Charmi
Nithin
Chandra

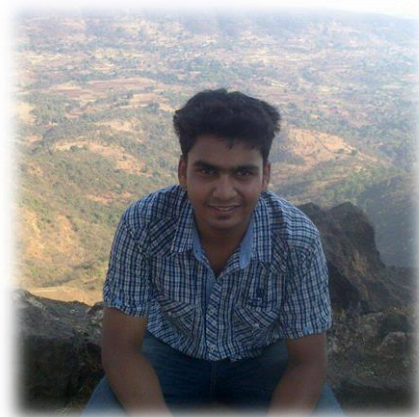
Maths & Physics Club

<http://stab-iitb.org/math-and-physics-club/>

Vision:

Students after coming to IIT and studying engineering tend to forget why they were fascinated by math and physics in their childhood and why they chose it. The documentaries, scientific phenomena happening around and interesting chats with elders were those things which had attracted us in our childhood towards our current field of studies. The aim of the club is to bring back that feeling of fascination inside students by showing them similar interesting scientific phenomenon and discussing about them in experimental demonstrations, lectures and group discussions. People should regain their enthusiasm about learning physics and mathematics and should like to come again and again in scientific gatherings for the same. There are many such facts which need college level understanding and are yet unexplored; We just need to start scratching the surface.

Anchal Gupta Manager



Conveners:

Darshil Dave

Suvajit Majumder

Bhumesh Kumar

Shashanka Viriventi

Vaibhav Bhosale

Initiatives:

- Weekly gatherings for discussing various advancements in research and new experimental results. Introduction of club membership titles
- Exclusive Mathematics and Physics quiz with focus on explaining the facts and on the spot scientific thinking rather than fact based questions
- Outstation research laboratory visit to a place which has facilities which IIT do not and increases the interest of students in that particular field
- In-sem Club projects for those who have some nice idea to work on and just need funding and a place to work at

Technovation & Tinkerer's Lab

Manmohan Mandhana

<http://stab-iitb.org/technovation/>

Vision:

Technovation is a program, started five years ago with the aim of acting as a platform for the students with innovative ideas who want to convert their dream projects into reality and providing them full support in terms of funding, mentoring, team formation and publicity. In the past years, this program has met with a mixed success and there are some issues such as timely deliverance of funds, finding mentors with good expertise over the field, delay in procuring technical components, finding proper workplace, lack of self-generated innovative ideas and lack of motivation among students.



Shyam Sunder Prasad



Dewashish Kumar Dey



Conveners:

Jashan Singhal
Sumit Jain
Umang Chhaparia
Akash Kishore

Initiatives:

- Advance withdrawal of funds and deliver it as soon as the bills are submitted
- *Mentors' Committee*: A committee comprising of competition team seniors, final/ pre-final year students, professors, alumni, PG tech enthusiasts and some people from IDC is to be formed. These committee will be reviewing the abstracts and timely progress in review meets. And they will be the source of mentors for teams
- *Industrial and Field visits*: Each industry visit will be with the aim of seeding of ideas and will be followed by a proper follow-up
- *Social and industrial projects*: Apart from self-generated ideas for projects, projects under various wings mainly societal and industrial projects will be floated.
- *Exhibitions and Seminars*: The projects will be provided proper avenues to display their work in exhibitions across India and it will be followed up by proper publicity in institute.
- *Tech Entrepreneurship and patents*: Full assistance will be provided to the teams who want their product to come in market and who want to get it patented.
- *Technovation as a Brand*: Creating a brand value of Technovation in the institute by showcasing the success of completed projects

Krittika: Astronomy Club

<http://stab-iitb.org/krittika/>

Vision:

Every one of us is amazed by the spectacle of the night sky and feels curious about its mysteries that lay hidden in plain sight. But very few follow it up as they grow up. At Krittika, we provide you an opportunity to do just that. Krittika is IIT Bombay's focal point for amateur astronomers and casual stargazers alike. This year I want to focus my efforts on increasing the outreach of the club.

Initiatives:

- Arrange trip to the Giant Meterwave Radio Telescope to broaden the scope of observations and do justice to the equipment that the club possesses
- Conduct telescope handling workshops and encourage observational astronomy
- Increase the outreach of the club by organizing observations session during daytime near some populated areas
- Propose to collaborate with hostel and department festival for conducting observation sessions
- Introduce Students' Picture of Astronomy (SPA) wherein, astronomical photographs taken by the students will be exhibited
- Collaborate with other clubs of STAB to conduct interdisciplinary talks

Sharad Mirani Manager



Conveners:

Pavan Hebbar

Vivek Arte

Sai Nirish Padala

Naitik Bhise

Ahilan AV (PG)

Vishnu Sivadasanan (PG)

Media & Creatives

Media and Creatives department forms an extremely integral part of all the STAB activities as well as the various club events. While all the individual clubs would be focussing on giving the final output in terms of creative technical projects or engaging, innovative events, the main goal of Media and Creatives department would be to attract larger crowds, majorly freshmen as well as increase the overall reach of STAB inside as well as outside the campus. While Media and Creatives department of STAB has not been much prominent in the past few years, we would like to develop this department into an important asset of STAB, which would in turn help to promote technical activities and nurture a sense of technical awareness amongst students. Through our technical newsletter, Lightsaber, posters, online pages and creative publicity methods, we aim to reach out to a larger audience and try to motivate more and more people to pursue technical activities.

Sagun Pai
Manager



Akhil Shetty
Manager



Vision and Initiatives:

- Try to ensure a better quality of posters. We would deploy some innovative poster ideas, such as XLR8 posters cut in car shapes, 3D posters wherein the poster conveys a clearer picture of the event and appeals people to participate in it.
- To improve the online publicity of STAB via a much more active Tech@IITB page and an FB reader app, with the purpose of promoting Tech through a variety of articles. One such series of articles would be Know your Tech Alumnus based articles, through which people in general would like to get involved in Tech.
- Co-operate with Insight, IIT BBC people and get a better coverage of Tech based events, including Annual Technical Exhibition, XLR8, etc.
- Publicize Tech through various out of the box ideas, such as usage of sensors and LEDs to display the name of the event, flying a RC plane before Aeromodelling GCs, etc.
- Will bring out 2 to 3 issues of Lightsaber over the course of the next academic year depending on the quality of content and the events that need to be covered. Improve the overall content of Lightsaber maintaining a proper balance of awareness based articles, issue based articles as well as promotion based articles.
- Contact journalists from widely read newspapers like TOI, Mumbai Mirror, HT, etc. with an aim to have articles in these newspapers covering interesting projects and technical activities going on in the institute.
- Co-ordinate with the Academic Office and try to include a STAB information pamphlet in the folder given to freshmen during their orientation, so that they get a better feel of the different clubs before actually getting into their first semester

Aeromodelling Club

<http://stab-iitb.org/aeromodelling-club/>

Vision:

The Aeromodelling Club, IIT-Bombay envision the club becoming open to more people through activities that are fun to perform and require minimal input. Club also want the entry barrier – both financial and otherwise – for participating in aero modelling events to be reduced, so that a lot more people can participate. Apart from increasing participation, Club desire to encourage people to innovate a lot by extending all possible help to them. Also, Club want to see the IIT Bombay flag flying high at major intercollege tournaments.

Initiatives:

- Offer semester-long(or longer) projects under the Aeromodelling Club, giving financial and technical help
- Undertake making of projects useful in everyday life, e.g.– Small LTA airships
- Introduce interdisciplinary events, such as a biathlon combining RC plane flying and robotic race
- Organize informative sessions by experts on modern technologies being used in the world of Aerospace
- Create an online database of components available to be issued from the club
- Project under club - Submarine, Autonomous hovercrafts, Tilt-rotor, thrust-vectoring kites

Kuldeep Singh Manager



Conveners:

Ankit sharma

Abhiroop Rastogi

Deepak Kumar Yadav

Shubham Chauhan

Kuntal Ghosh (PG)

Website

<http://stab-iitb.org/>

Vision:

Web presence is an important part of any organization. And STAB being the main technical body of IIT Bombay we need to ensure to have a proper web presence and online activities to ensure people from in and out of the campus will be involved in technical activities. The main vision is to make the technical knowledge present in IIT Bombay to reach to wider mass around the Globe. The people in the campus should easily share their knowledge to everyone in the campus and around the globe. People from all around the globe should be able to have benefits of immense technical knowledge within IIT Bombay.

Prateek Chandan Manager



Conveners:

Ashish Rathie

Shubham Yadav

Initiatives:

- Renovating the STAB Website and to make an awesome website with all the tech related info present
- Establishing a Tech blog to initiate knowledge sharing platform
- Establishing Tech QnA forum to help people ask tech related doubts and people from the campus could help them
- Documenting about all the clubs and events conducted by them and provide them full fledged website
- Documenting the technical projects and make it available to everyone
- Publicizing STAB along with media to expand it further