

Operations in Web and Coding Club

April 1, 2017 - March 31, 2018

Managers:

Nihal Singh and Sajal Narang

Conveners:

Kumar Ashutosh, Mrunmayi Mungekar, Sahil Shah, Sarthak Khandelwal

Volunteers:

Akash Kumar, Alok Bishoyi, Arsh Ansari, Aryan Agal, Ashish Mittal, Bidish Ghosh, Chinmay Awale, Ishan Tarunesh, Kaushal Kishore, Nived Kodavali, Owais Chunawala, Rajarshi Saha, Rishika Gupta, Sucheta Ravikanti, Vaibhaw Kumar, Varun Patil, Yashvardhan Didwania



Events

Talk on Building a career in Tech without a CS Major ([09/04/2017](#))

A talk on Building a career in tech, with a roadmap of the steps a student should take in order to stay on top of the competition.

<https://wncc-iitb.org/events/10-amangoelstalk.html>



ITSP Bootcamps

Introductory Bootcamps in the most popular topics to get freshmen started with their ITSP projects. There were 3 sessions in the series.

- **Git ([28/04/2017](#))**: Introduction to version control in general and Git, GitHub in particular.
- **Android ([29/04/2017](#))**: Teaching the basics of Android and familiarizing them with Android Studio.
- **Python ([30/04/2017](#))**: Introducing them to the most widely used programming language in ITSP.

Google I/O Extended ([17/05/2017](https://wncc-iitb.org/events/11-GoogleIOExtended17.html))

Google I/O is an annual software developer-focused conference held by Google in San Francisco, California that was started in 2008. Google I/O features highly technical, in-depth sessions focused on building web, mobile, and enterprise applications with Google and open web technologies such as Android, Chrome, Chrome OS, Google APIs, Google Web Toolkit, App Engine, and more. The "I" and "O" stand for input/output, and "Innovation in the Open".

We had Google Developers' Group, Mumbai here in our LCH for the live screening of the Keynote of Google I/O. The streaming started at 23:00 and lasted for approximately two hours which was preceded by a brief interactive discussion on the topics introduced by the Google Technology. The event observed a whopping footfall of around 150 people which included people even from outside the institute. It was fun watching and discussing about these developing ideas with like-minded people. They relished the screening with subs and cokes sponsored by the team GDG. The event was concluded by presenting t-shirts and stickers to the attendees.

This was our first association with GDG, Mumbai and the event turned out to be an immense success. They seemed pretty affirmative about such further collaborations in the future.

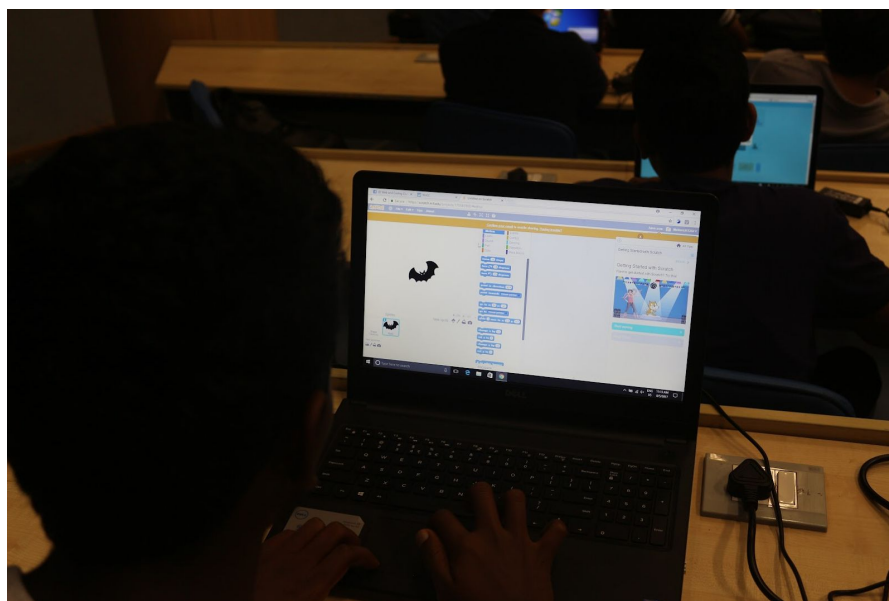
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Scratch Day (04-06/08/2017)

The introductory in-semester event targeted for freshmen that comprised of hands-on sessions on MIT Scratch, followed by a 30 hour hackathon on the same platform. This event witnessed a turnout of about 350 people where we introduced our club(activities, motto), talked about coding and introduced our plans for this semester.

The next day was spent in conducting the hands-on workshop for acquainting the freshmen with Scratch, at the end of which we got Pizzas for all. The following 30 hours were spent hacking, at the end of which we had 44 entries. Top 3 entries + 3 special mentions would be felicitated with prizes in our next event.



GSoC Incubation Cell

Conducted a number of events and made past GSoCers more approachable than ever. Encouraged freshmen and sophomore aspirants to send proposals, who wouldn't have done so otherwise.



- ***Introduction to Open Source*** ([16/08/2017](#)): The session was addressed by past GSoCers (including Kalpesh, Sumith, Arpan, Arunabh and Nihal). They narrated their GSoC experience and gave Open Source advice in general, giving some tips to keep in mind if you are a GSoC aspirant. This was mainly intended to motivate the students for GSoC 2018.

Conducted multiple events to acquaint aspirants with basics of how to dive into Open Source.

- ***Git 101*** ([02/09/2017](#))
- ***GitHub 101*** ([22/09/2017](#))
- ***Git + GitHub review session*** ([06/10/2017](#))
- ***Introduction to IRC*** ([27/10/2017](#))

In addition, the [GSoC Incubation Cell Facebook Group](#) was very active throughout, serving as a source of updates and aggregator of knowledge/experiences from past GSoCers.



ICPC Incubation Cell

Conducted multiple sessions on competitive coding. Revived the existing [procon Google Group](#). Brought up competitive coding activities from ~0 to considerable.

- **Introduction to Competitive Coding** ([04/10/2017](#))
- **Data Structures and Algorithms** ([01/11/2017](#))
- **Introduction to Competitive Coding** ([16/02/2018](#))

In addition, the [Competitive Coding Facebook Group](#) was created and used for constant contest updates.

Web and Coding Casual Conversations (WnCCC)

A new set of informal hangouts, meant to discuss ideas and get to know other people and what they do.

- [18th May, 2017](#)
- [01st September, 2017](#)

Reflections

An informal series of events conducted in Hostel Lounges, where speakers discuss about their CS research projects conducted as RnD projects or internships.



- [22nd September, 2017](#)- **Ritwick Chaudhry** spoke about the project he worked on during his summer internship at Adobe Research. This project was a great success and is being patented and submitted as a research paper. His project was on personalizing learners' experience on e-learning platforms. A futuristic and important part of e-learning systems like MOOCs is being intelligent and being able to gauge the students skills and learning styles.

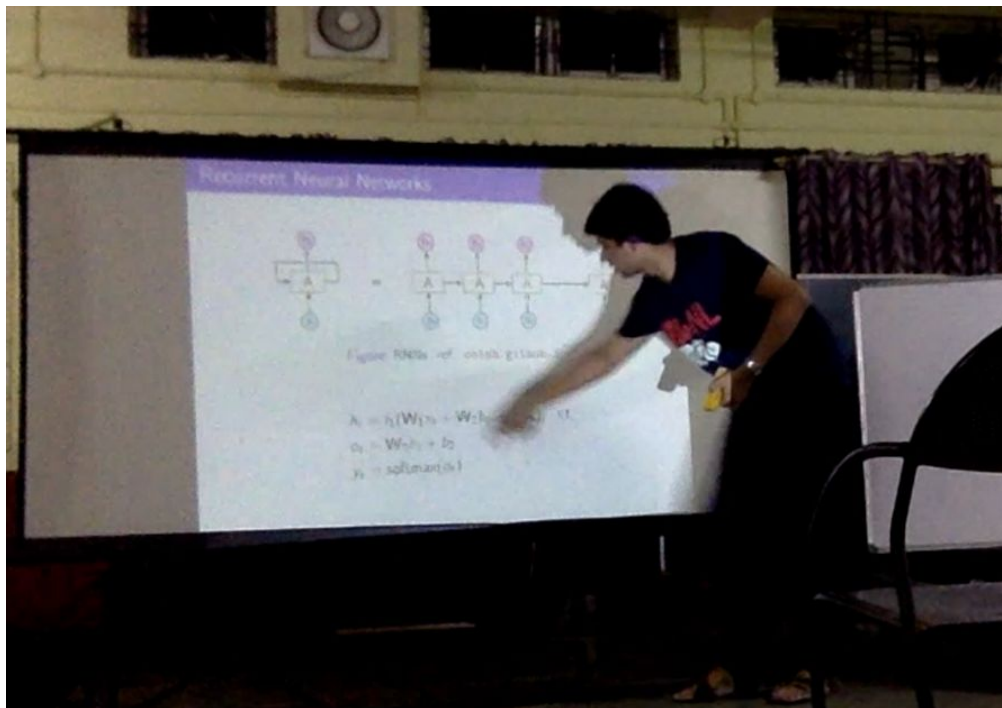
- [13th October, 2017](#)- **Kumar Ayush**, spoke about a summary of his experiences based on using different programming styles. A few years ago, Cristina Lopes, a professor of Informatics and Computer Science at UC, Irvine wrote a book called "Exercises in Programming Styles". She solves a simple problem, finding term frequency, using different 'styles' of code. The talk included a summary of Cristina's work compounded with Cheeku's own experiences.
- [15th January, 2018](#)- **Sanat Anand** spoke about Theoretical Cryptography, its subdivision, its adaptation from number theory and applications in Network and Information Security. The discussion included lateral thinking problems in the context of secure communications and their analogy in the field of Cryptography.



- [1st February, 2018](#)- **Siddhant Garg**, a fourth year CSE undergraduate spoke about both, the research he has been pursuing in the institute as well as about his university internship in the summer after the third year. Dictionary learning is a representation learning method which aims at finding a sparse representation of input data in the form of a linear combination of basic elements which constitute a dictionary". Dictionary learning techniques are particularly useful in tasks pertaining to image processing like image classification, etc. Siddhant worked on a project under Prof. Suyash Awate with the task being performing dictionary learning for image classification in a semi-supervised setting. He also spent his summers in 2017 in the Very Large Scale Computing Lab (VLSC) at EPFL in Lausanne Switzerland. He was working under Prof. James Larus on the project of building Automated Debugging Systems for Data Centres.



- [5th February, 2018](#)- **Kalpesh Krishna**, who is working with Prof. Preethi Jyothi, CSE Department and did his internship at TTIC, University of Chicago spoke about the technical aspects of his research work. He spoke about the modern paradigms for end to end speech recognition. A broad outline includes - Introduction to Speech Recognition, Sequence to Sequence Models and Attention, Connectionist Temporal Classification.



Introduction to Web Development ([23/10/2017](#))

A session on Web Designing and Development, where the attendees were given a fast paced introduction on how to create their static homepages using HTML5, CSS and Javascript. This event saw the collaboration of WnCC with Institute Design Council and Mood Indigo Creatives. Soham Khadtare, the Culturals Design Nominee and Mani Rambhia, the MI Creatives CG spoke about the design concepts one should bear in mind while making a website.



Sessions on Information Security (Cyber Security Club)

- **Ciphers - br34k th3 c0d3** ([23/09/2016](#)): The first session on Information Security, Ciphers.
- **Introduction to CTFs** ([27/10/2017](#)): An introductory session on Capture The Flag contests and Information Security in general.

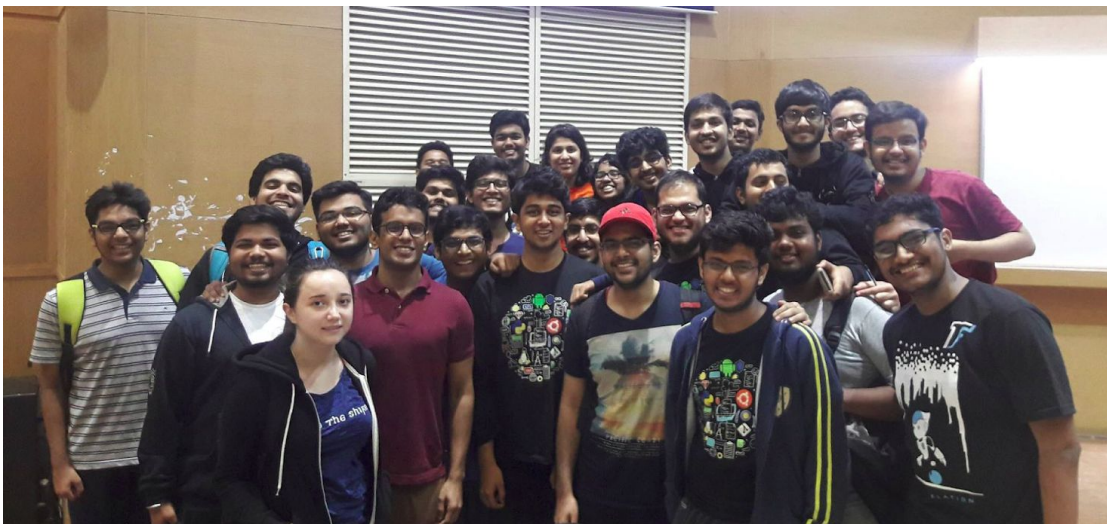
Global Conference on Cyber Space Regionals (06-07/11/2017)

Conducted the pre-final event of the Global Cyber Challenge in collaboration with Prof. Saravanan Vijayakumaran from EE dept. Brought in cyber security experts from outside and hosted participants from nearby college.

Global Conference on Cyber Space(GCCS) is a prestigious global event where international leaders, policy makers, industry experts, think tanks, cyber wizards, etc. gather to deliberate on issues and challenges for optimally using Cyber Space. The theme for GCCS 2017 is "Cyber4All: A Safe, Secure and inclusive Cyberspace for Sustainable development". The conference will be held on 23-24 November, 2017 at Aerocity, New Delhi. WnCC, Cyber Peace Foundation (CPF) and Policy Perspectives Foundation (PPF) in collaboration with Ministry of Electronics and Information Technology (MeiTY) and National Critical Information Infrastructure Protection Centre (NCIIPC), Government of India organized a Cyber Challenge- A National Cyber Security Hackathon as a run up event to Global Conference on Cyber Space (GCCS) 2017 and the Grand Finale was organized at GCCS 2017, New Delhi. IITB was proposed as one of the venues for the 48 hours regional hackathons.

Talk by Debarghya Das (17/01/2018)

Debarghya Das, better known as Deedy, is a computer scientist at Google New York. He has been working on Google Search for two years, first on building machine learning models and currently on leading the Cricket effort on search. In the past, he's worked for Facebook, in New York. Before this, Deedy graduated with a Bachelors and Masters in Computer Science from Cornell University in 3.5 years. The talk was centered around Deedy's work at Google, New York. With a discussion on work culture, industry trends and the scale at which Google operates. The talk ended with a fun, open QnA session.



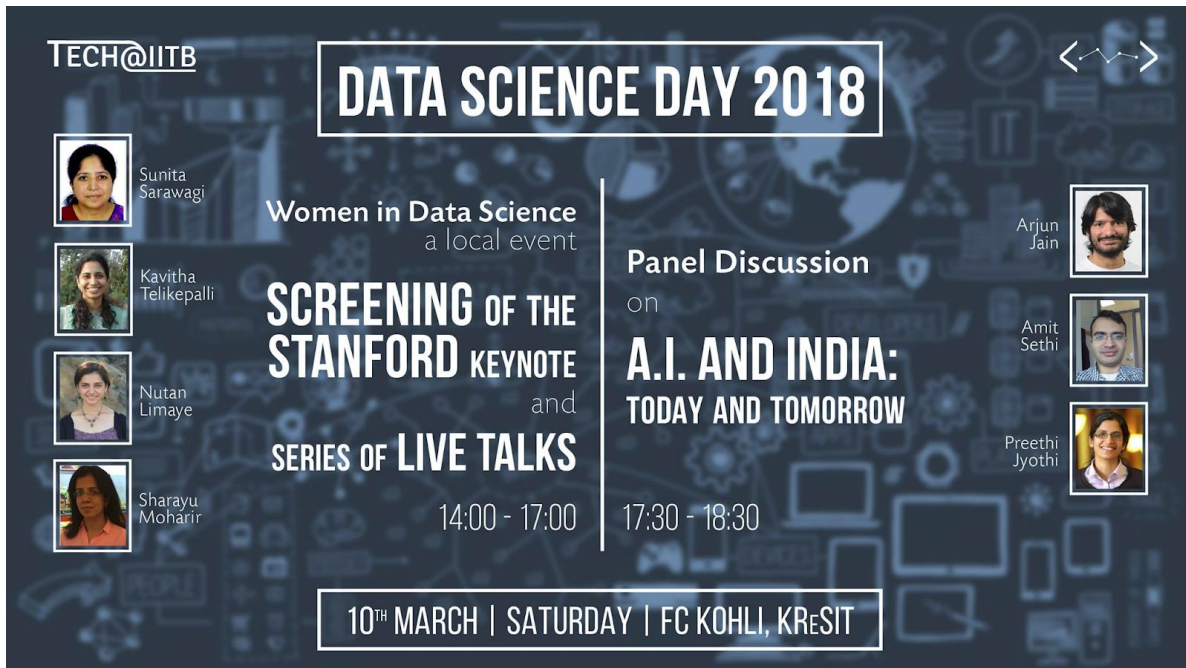
Andro NG: An Android Workshop and Hackathon ([09-13/02/2018](#))



On the weekend of 10th-11th February, we conducted a workshop covering the fundamentals of Android, 'Andro-NG'. The workshop consisted of two sessions - the Installation session and the Android Workshop. The sessions were taken by Sajal Narang. The workshop was attended by 65 people. The workshop was followed by an Android hackathon, spanning over the next 50 hours. The hackathon received submissions by 18 people out of which 3 teams were declared as winners and prizes distributed soon after.



Data Science Day ([10/03/2018](#))



TECH@IITB

DATA SCIENCE DAY 2018

Women in Data Science
a local event

**SCREENING OF THE
STANFORD KEYNOTE**
and
SERIES OF LIVE TALKS

14:00 - 17:00

Panel Discussion
on
**A.I. AND INDIA:
TODAY AND TOMORROW**

17:30 - 18:30

10TH MARCH | SATURDAY | FC KOHLI, KR_ESIT

Speakers:

- Sunita Sarawagi
- Kavitha Telikepalli
- Nutan Limaye
- Sharayu Moharir
- Arjun Jain
- Amit Sethi
- Preethi Jyothi

WnCC organized the first ever Data Science Day in 2018 to celebrate data science. It consisted of a series of talks and panel discussion containing a mix of speakers from both industry and academia. The Data Science Day also consisted of a local Women in Data Science (WiDS) Stanford conference. Overall the event consisted of the screening of the keynote, live talks from women speakers, a panel discussion on “AI and India-today and tomorrow” and student project presentations. The event saw involvement from several professors- Prof. Sunita Sarawagi (CSE, IIT Bombay), Prof. Nutan Limaye (CSE, IIT Bombay), Prof. Kavitha Telikepalli (CS, TIFR), Prof. Sharayu Moharir (EE, IIT Bombay), Prof. Amit Sethi (EE, IIT Bombay), Prof. Preethi Jyothi (CSE, IIT Bombay)



Projects and others

Internship Portal: A platform to connect companies, startups, and professors to students looking for internships and projects. Currently, the portal has 700+ student registrations and ~20 floated internships.

<https://portals.wncc-iitb.org/internships>

RPi TV Noticeboard: With the help of Nipun and Sravan, set up the online publicity solution. Built with love by WnCC, the RPi TV Noticeboard is a revamped version of Manish Goregaonkar's python script with a new Django backend. Launched first in H9, it is soon to be deployed in multiple hostels (TVs have already been purchased for this purpose).

<https://noticeboard.wncc-iitb.org/>



Weekly Newsletter: Check the WnCC Google Group for a newsletter every Sunday (35 in number till March 31, 2018). The newsletter consists of the week's activity in WnCC and in the world of coding with a readership of 2000+ students and alumni.

https://groups.google.com/forum/#!forum/wncc_iitb



Seasons of Code: Held the second iteration of WnCC Seasons of Code <http://wncc-iitb.org/soc/> over Summer 2017 with over 40 senior students of IIT Bombay and FOSSEE mentors. The program received 85+ students and had 26 projects. We intend to continue this with more rigour, targeted and funded projects next year.

<https://wncc-iitb.org/soc>



Grundy- our wiki: Maintained and added to the wiki that was created on NYE '17. Heavily publicised the wiki in throughout the year in all events, improved SEO, more content and plugins.

<https://wncc-iitb.org/wiki>



YouTube channel: Popularized and added substantially to the YouTube channel to host event videos, interesting discussions and project descriptions, Rattlesnake problem statements and talks.

https://www.youtube.com/channel/UCs3x_XxwScIAzDUfN1IbbGw/

Online Journal: Sustained the existing hardbound Journal from last year and built an online version for much more convenience. The Journal consists of all important information that needs to be passed down over the years, including philosophies, documentation of assets, know-how of how to get things done.

<https://journal.wncc-iitb.org/>

WnCC Website: Revamped the website to drastically improve the front page. Added new sections for initiatives, collaborations and finally a team page. Started to build a family tree that dates back to the origin of WnCC. We also plan to build a similar GSoC Legacy and ICPC Legacy page.

<https://wncc-iitb.org/>

Web Policy: Influenced the change in policy for bringing all Tech@IIT-B online presence under the management of WnCC. Initiated a movement towards a standard website theme and central management for more cohesion between websites of different tech genres.

Logo & Merchandise- Designed and printed t-shirts, keychains, and laptop stickers. Our Facebook page crossed 11,000 likes and 12,000 likes in our tenure.
(<https://www.facebook.com/pg/wncc.iitb>)



ITSP: Mentored, managed and reviewed the Institute Technical Summer Projects. A total of 7 teams completed their abstracts converting ideas into presentable projects, under WnCC.

Administrative accomplishments: Handled more than 75% of the ITC budget, directly or indirectly.

General Championships

The following three GCs were conducted-

- **Web Development GC-** Introduced the first ever Web Development GC. Aimed at providing impetus to create personal homepages, while also letting students contributing to their hostel standing, this GC saw good participation from several hostels.



- **Competitive Coding GC-** Continuing the legacy of the age old competitive coding GC, this year's GC was held as a Codeforces educational round in order to make participation seamless from hostels and remove any issues of question plagiarism.

- **Capture the Flag GC-** In collaboration with the [Cybersecurity Club](#), we conducted the first ever CTF GC. With questions from all sorts of genres, this served as a perfect entry level GC. The response received was phenomenal and the competition was on cutting edge. With 252 IPs logged, this was historically one of the best tech GCs conducted.



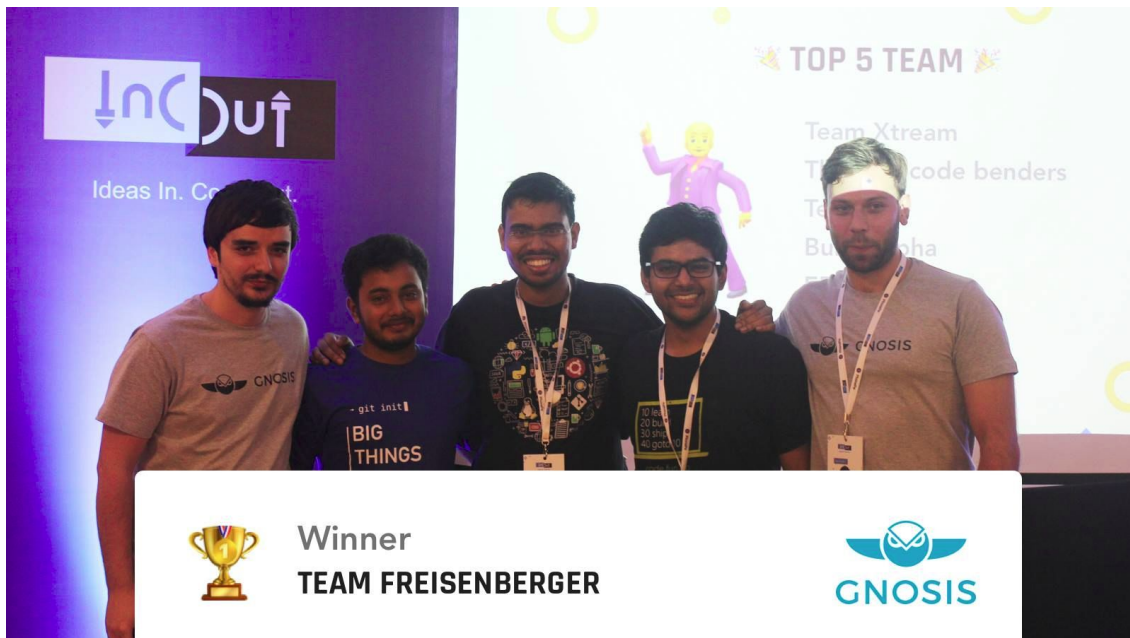
External Relations

Ubisoft: Initiated a collaboration with the Ubisoft game development studio in Pune. Organized two hackathons in their studio in October and March and invited them to the institute for a talk. Both hackathons saw winning teams from IIT Bombay, with every team member grabbing a PS4 in the final one.



Mercari: Collaborated with us for the conduction of their hackathon.

Hack InOut: Helped in publicising the annual Hackathon in IIT Bombay, once again. Winners of the blockchain track belonged to the WnCC community.



GDG Mumbai: Consistent and continued collaboration with WnCC, conducting events with us and keeping us involved in the other events happening around Mumbai.

Vital Contacts: Sahil Mhapsekar, Jatin Malhotra, Google, Facebook India Office

Udacity: Interested in collaborating with us and prospect for future sponsorship in events.

Atos: Interested in conducting a hackathon and webinar with us.

Microsoft: Interested in conducting a hackathon with us.

Community Building

tty10: Successor of tty9, this is the group of this year's conveners and volunteers.

tty0: Amalgamation of tty9, tty10 and seniors that have been involved with WnCC in the past.

Parties: I take pride to say, the largest WnCC parties took place in the tenure of 2017-18. On more than two occasions, the full first floor of Sunny was booked and more than 3 tall bottles of good stuff emptied. For more sober meets, the Civil Café and Brews and Bites used to be the regular spot for hangouts

IITB Dev Community- Laid the foundation for the IITB Dev community, which shall pilot next year. The dev community shall undertake and maintain the set of projects that it has under its belt-

- a. **IITB App-** Alpha version of the app is finally ready and launches in April.
 - b. **Tum tum tracker-** The tum tum tracker project, started as a SoC, completed recently.
 - c. **Website boilerplate template-** Started to make a website boilerplate template over which all club websites would be built. Handle maintenance and development of all tech websites.
 - d. **Internship Portal, RPi TV Noticeboard, Wiki** and other things we have/will build.
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