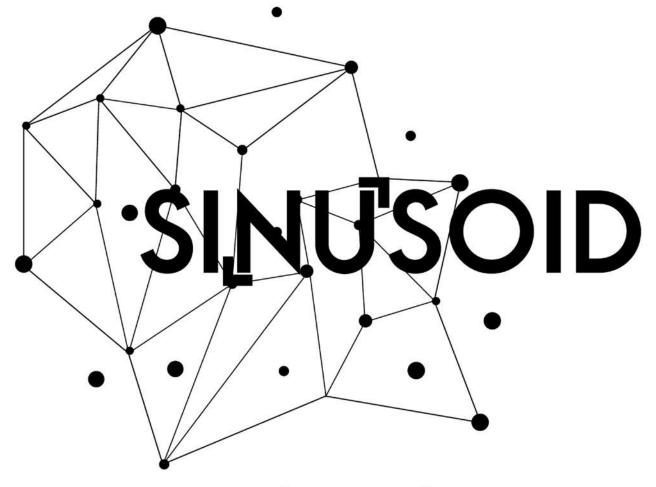


### Annual Tech Fest



26<sup>th</sup> to 28<sup>th</sup> October 2018

Prizes worth 5 Jakhs

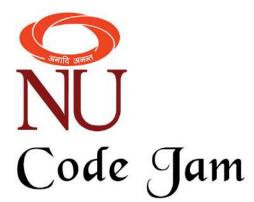
NIIT University Neemrana, Rajasthan



# SINUSOID

### Events

- Codejam
- Light Painting
- •Business Conclave
- ·Weave the Web
- •errorStack
- •Capture the Flag
- •Digital Art
- •Tech Quiz
- Mock Test
- •Chess
- •Mr. Googler
- •RoboSoccer
- RoboRace
- •Hackathon
- Makeathon





For all the coding enthusiasts, NIIT University presents to you 'Code Jam', an event in siNUsoid 2018. It is a competition to challenge your understanding of programming languages.

The competition will be consisting of 7 algorithmic problems which have to be solved in a fixed amount of time. The person to solve maximum number of questions in the given time will be declared the winner.

Programming is a skill best acquired by practice and example so, go ahead maniacs, practice and show what you got!

#### Rules & Regulations

- •All the problems must be solved in the given amount of time only.
- •Whoever solves the maximum number of questions out of the given 7 in the given time wins.
- •Event will be hosted on either HackerRank or CodeChef so create an account before coming for the event.
- •All the teams will be given the same set of questions to solve.
- •A program will be considered wrong if it fails even one test case.

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- •Only one solution to a problem can be submitted.
- •Plagiarism will lead to disqualification.

- •CodeChef Certificates, Laddus 200, Prizes worth 15k
- •CodeChef Certificate, Laddus 100.





The Light Painting competition aims at instigating your creative side. We give you an amazing opportunity to showcase your creativity and explore your skills. siNU-soid is calling digital artists from around the Delhi-NCR and Jaipur region to show their best work of art.

A source and a high exposure camera is all you need. So use your creativity and create some new and attractive designs and patterns. You will be judged on how much you stretch your horizons to be creative.

So go ahead, play with light!

#### Rules & Regulations

- •Participants are required to submit their art before 10th of October 2018 and win their share of the prize pool.
- •The artwork doesn't have to be created exclusively for the competition.
- •Participants can submit upto 3 submissions.
- •This event will have a winner and 2 runner-ups.
- •Include your name in the title of the submission.
- •Resize your image according to the dimensions given.
- •Keep the file size within the size declared before the event.

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- Post editing of the artwork is not allowed.
- •Winner will be decided on the basis of composition, colour blending(if any) and the amount of engagement created on online platform.
- •Submit the photograph in the file type declared before the event.

- •Memento, T-Shirt.
- Certificates for Winner And Runner Up (1st).





### Business Conclave

NIIT University presents to you Business Conclave as a part of siNUsoid v2.0. It aims at kindling the latent entrepreneurial spirit of young students by making them face and solve real time problems. It is a consummate platform for upcoming commerce and science students to demonstrate their skills, apply their knowledge, deliberate and present their ideas.

The event will consists of pairs of two as a team - a technical and a non technical member. The teams shall be provided with a real time problem for which they shall have to devise a solution and present their ideas on the day of the event.

The winners shall get an opportunity to put forth their ideas to the company. siNUsoid's Business conclave offers a promising and enriching experience to the future entrepreneurs and problem solvers.

The key is to Think different, Plan smarter and Engage faster!!

#### Rules & Regulations

- •Each team consists of two participants.
- •The contest duration is for 120 minutes.
- •Contest will contain questions with different level and weight.

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•Event organizers reserve the right to disqualify any team that is found guilty of violating the rules.







### <html> Weave the Web </html>

Empowering the creative and technically proficient who are interested in web development, siNUsoid 2k18 presents to you- Weave the Web. In this website designing competition participants will have to design a website within a given time limit from scratch. There are no limitations imposed on the creativity of the participants or the website designing technologies used by them.

Form your squad and launch up your IDEs! Happy Coding!

#### Rules & Regulations

- •The time limit is 2 hours.
- •You have to build your website from the scratch at NU.
- •Participants can prepare and practice the code they are going to write in the 2 hours but they cannot use previously written code.
- •Each team can have a maximum of 4 members
- •The Website created will be scored by a local judge.
- •The functionality, aesthetics and complexity will affect the scores given by the judge.
- •Plagiarism will be strictly penalised.

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- •Prizes Worth 25k.
- •Certificates for Winner And Runner Up (1st).





errorStack of siNUsoid is an online event which tests your debugging skills. All you require is an innate understanding of programming logic and an eye for detailing that shall assist you in going over the given code with a fine toothed comb. This event encourages the participants to implement the knowledge that they have acquired to debug a program written in an unconventional language and thus pave their way to become an excellent coder. The participants are required to mould this code into a program that produces the desired output.

#### Rules & Regulations

- •This event allows only solo participation. Only one person is allowed.
- •The event is open to all College/Institute/School students.
- •The event duration is for 120 minutes.
- •Contest will contain questions with different levels and weight.
- •Event organizers reserve the right to disqualify any team that is found guilty of violating the rules.

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- •Prizes worth 13k.
- •Certificates for Winner And Runner Up (1st)..





### Capture the FLag

Capture the flag is an online event that tests your knowledge in a wide range of topics like cryptography, steganography, reverse engineering and computer security. The event consists of a series of challenges that vary in their degree of difficulty, and that require participants to exercise different skillsets to solve. Each question solved is a 'flag' and the player with the most flags wins.

#### Rules & Regulations

- •Students have a time of 4 hours to solve the questions of the CTF.
- •The student who reaches the final destination first wins.
- •Students are required to solve tricky questions which can be made using ciphers and encryptions as well.
- •The questions of the CTF will be in the form of pdfs that can be downloaded through the CTF website once its up and running during the event.
- •Students can take help of the Internet and other people as well.

- •Prizes worth 25k.
- •Certficates for Winners And Runner Up (1st and 2nd).





siNUsoid v2.0 invites all digital artists to come and express themselves. Through a perfect blend of creativity and technology, this event requires you to display your imagination through a piece of artwork made using a digital editing software.

They say pictures speak a thousand words, come and prove it.

#### Rules & Regulations

- •The theme decided for the competition is 8-bit.
- •Students are required to make attractive artworks within a time span of 2 hours.
- •The judges shall decide which artwork is the best and that student is deemed to be the winner of the event.
- •Students are allowed to use any digital editing software they are comfortable working with.

The winner gets a T-Shirt of his digital art along with a memento and medal.

Certificates shall be awarded to the winner as well as the runner ups.

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- •Memento, T-Shirt and Certificate for Winner.
- •Certificates for both runner ups(1st and 2nd)..





The Tech Quiz of siNUsoid v2.0 is the ultimate challenge to test the the youths' knowledge and application skills. It aims to increase their awareness regarding the world and the technological feats being achieved around them. For all you Quizzards out there, this is your chance at portraying your knowledge and understanding of the true essence of technology.

#### **Benefits to Students**

- •Encourage independent study and academic excellence.
- •Recognize and appreciate non-traditional values for competition.
- •Build self-esteem and pride.

#### Rules & Regulations

- •Teams of maximum 3 participants shall be allowed to participate.
- •Teams must possess a name for their identification.
- •The members of a team should be from the same college
- •Electronic gadgets such as mobile phones, pagers, tabs, laptops, etc., are not allowed in the competition.

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- •Trophy & Medal for Winners.
- Certificates for Winners and Runner Up.





Clammy palms, cold sweat, sleepless nights- let us ward it all away by helping you make the exam hall your comfort zone. The mock test conducted by siNUsoid v2.0 will give you a feel of the real exam, thus reducing pre-exam jitters and helping you relax for the real deal. The syllabus and the format of the test will be the same as JEE Mains.

#### Rules & Regulations

- •Students are required to solve 90 questions within a time span of 3 hours.
- •The test shall contain questions of both Mains and Advance level.
- •No negative marking for the students in any of the questions.

#### **Prizes**

·Certificate and Medal for Winners.





This will be one on one elimination match tournament following a binary tree structure. The loser of the match will directly be eliminated and the winner will succeed to the next level of the tree. The player to win the most number of matches wins the tournament.

The event will be conducted offline, under the supervision of the organisers and in case of any disputes, the decision of event coordinator will be final.

All standard rules (including touch-move and 3 fold repitition rule) for the game shall apply.

- •Trophy Medal for Winners.
- •Certificates for Winners and Runner Up.





Imagine a contest where every answer is available to you with just a couple of clicks. You just have to know how to do it right.

Do you think you know how to 'Google'? Let's find out. In an age where the name of a search engine has been included as a verb in the Oxford Dictionary, Mr. Googler, an event in siNUsoid 2k18 has been designed to test your proficiency in the art of 'googling'.

Get ready with your google hacks.

#### Rules & Regulations

- •Time limit- 30 minutes.
- •All questions can be found on Google by either searching the images on the given question or searching parts of the question. The contestant that solved the maximum number of questions is declared the winner.
- •In case of more than one contestant solving the same number of questions, the contestant who solved the questions in minimum time will have the advantage in the judging process.
- •In case someone solves the same number of questions, then whoever did the question first will have the advantage in the judging process.

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- •There is no need to use search engines other than Google. The questions are designed such that the answers are easiest to find on Google.
- •The questions are designed such that the answers are easiest to find on Google and hence there is no need of any other search engine.

- •Prizes worth 2k.
- Certificate for Winner and 1st Runner Up.





### Aim

Design a robot which plays soccer. The robot would compete against others in 1-1 matches.

### To design a manual bot that can push or drag balls into

**Problem Statement** 

enemy's goal-post besides being a good goalkeeper i.e., an all-round football player. Size: 30cm x 30cm x 30cm

Note: The size restrictions should be strictly followed. No arguments regarding this matter will be entertained.

**Team Specifications** 

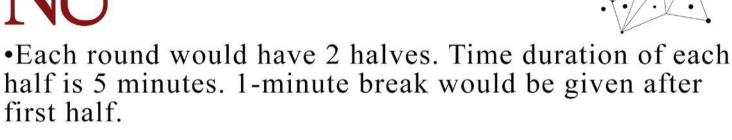
#### •A team can have a maximum of 4 members. •A team can register as two separate teams if they are

- using two different bots for the event.
- Gameplay This is 1-1 type game. A team can have maximum of 4

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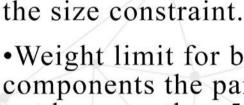
members.

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ee.

- •The game will start at the count of 3 given by referee followed by whistle. In case a team starts its robot before the whistle, the game will be restarted and a team making this
- •Each goal scored by a team by rolling the ball on the ground will fetch the team 1 point. •Maximum 2 members per team will be allowed to remain close to field for operating the robots.
- goals and at the same time prevent a goal too.
- •The ball used would be Soft sponge balls. •In case of jam up of robots for more than 30 seconds the robots will have to kick-off again at the order of the refer-
- hands of coordinators.
- •In case of a tie, 5 penalties would be taken by each team from the end of the white area one after the other.
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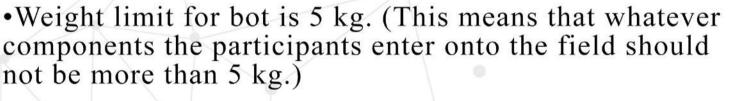
demands.

fied.

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**Bot Specifications** 

the kick mechanism.



•The bot must not be made from Lego parts, or any readymade assembly kits. •Each team is allowed to play with only one bot.

•The bot should not damage the arena in anyway. If bots

found damaging the arena will be immediately disquali-

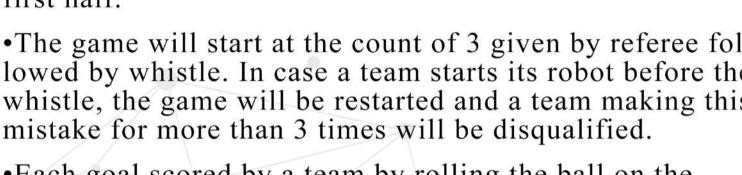
•The final decision is at the discretion of the event staff.

participants themselves. Please do not make any special

- •The potential difference between any two points of the bots must not exceed 24 V DC.
- SINUSOID Disqualification

•Disobeying the rules and the regulations.

- plinary acts with the event management, judges, any other rivals.
- controller to pull, move or hold the bot, i.e. if the wire becomes taut at any point, the team will be disqualified.



•Attack on wires of opponent bot. •Unavailability on the given time of the match. In disci-

•The bots from both the teams must attack by making •The bot must push or drag the balls into goal post without crossing a dead line.

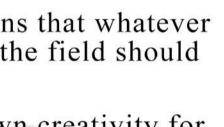
- •In case of any discrepancy the final decision rests in the

•Bot should fit in a box of dimension 30cm x 30cm x

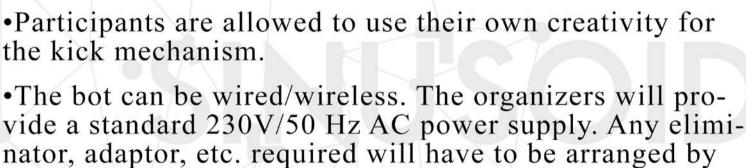
whatever kick mechanisms the bot has). The external

30cm (1 x b x h) at the start of the competition (including

device which is used to control the bot is not included in



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•If found Cheating while the event in any manner. •Found interfering with the bot during fight either with opponent's bot or personal bot without permission. •If the bot operator is seen to be using the wire from the

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## Design and fabricate an autonomous vehicle controlled

wirelessly and run on the track. Arena

#### •The arena size shall be 3m x 1.5m. Length of one track would be 15cm.

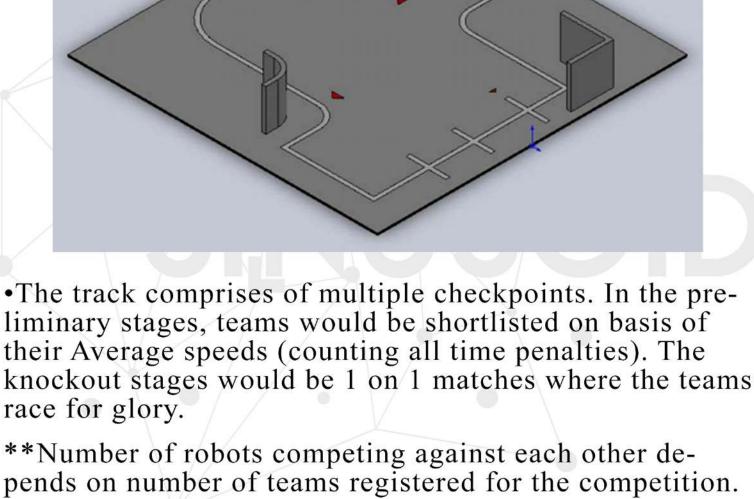
disqualify team.

- •\*\*3 robots would compete against each other at one time. No robot should change the track while racing it would
- •There would be 3 laps race. One which completes all 3 laps and comes first would qualify to next round (knockout stage).
- •The arena would consist of smooth curves, U- turns and sharp corners (not more than 90 turns) •A sample arena has been shown below. The real arena would be disclosed at the time of the competition.

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- Game Rules •Once the robot is put on the start line, no further interference by the operator is allowed.
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•The average speed of the robot (=distance covered/time

stages. Teams would then move on to the knockout stage

taken) would be the criteria for judging in the initial

•A time penalty of 10 seconds would be imposed each

ward most wheel, track, or leg of the robot contacts or

•Knockout stages would be one on one competitions and winner.

time the bot touches the wall.

on this basis.

the team reaching the finish line first is declared the

of all the laps would be considered to determine winner. •If the team members wish to touch the robot after the robot starts from the start line, they can take a timeout. A second penalty will be levied in case of a timeout. However strategies based on timeouts may lead to disqualifica-

•A robot is deemed to have crossed the line when the for-

crosses over the finish line. In case of tie, average speed

•The robot must be able to fit inside a box with dimensions of 20 cm X 20 cm X 15 cm and weigh less than equal to 5 kg.

•The machine along with the power supply should fit in

the above mentioned dimension box and must together

•During the game the machine is allowed to expand its

parts provided it does not damage the arena and do not

•The organizers will provide a standard 230V/50 Hz AC

nator, adaptor, etc. required will have to be arranged by

participants themselves. Please do not make any special

•The machine must be fully wirelessly controlled with a

power supply to recharge batteries if required. Any elimi-

•The machine must use only mechanical power or mechanical power converted from a source of electrical

energy.

weigh as mentioned above.

cross the track in any way.

- •The machine should not leave spare parts in the arena at any stage. This can lead to a time penalty or may even •The machines you build will be first checked for size and
- working mechanism or game strategy is considered hazardous in any way. sinusoid@st.niituniversity.in nusinusoid.org.in

•Judges have the right to disqualify any machine whose

ment will be entertained. Constructor's Rules

Disqualification

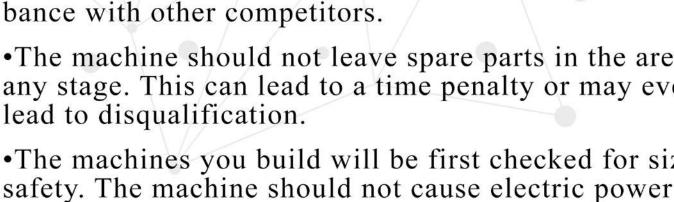
to disqualification.

dents from different university can also form a team.

touch the machine or the arena. Failure to do so will lead •Any kind of damage to the arena will attract disqualifica-

- •The teams will be asked to get ready 5 minutes before the start of the match. If a team is not ready within the stipu-
- lated time, the other team will be declared as the winner. •Judges have the right to disqualify any team if they feel the team is not playing with fair interests.

•A team can take any number of timeouts. However they will have to restart their robot from the previous checkpoint. •There will a technical inspection before every match. **Conditions** 



breakdowns.

demands.



•In case any kind of dispute arises the judges' decision

will be considered final and binding to all and no argu-

•During the match, the team members are not allowed to

tion.

remote working on dual frequency bands to avoid distur-

•A team can consist of a maximum of 4 members. Stu-•Each team must declare a name for their machine at the time of competition.

tion.





Theme for our Hackathon is Smart City

### **Topics**

•VR/AR: In this topic, we would expect teams to develop a

solution in this emerging field for better travel and Field tripping as well as architecture industry based solutions and for the starters you can check with the very famous Niantic. Game Development

In this topic, we would expect teams to make

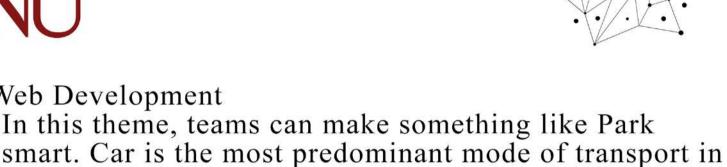
Educational games. While many parents and teachers complain about video games, there are some great educational games that can be made, that can help with the learning process. Train in a variety of subjects, using games to make learning fun instead of boring. App Development We expect teams to make something like Smart Health.

Global interface between hospitals and patients, an application which combines the health data with an aadhar card so as to make the health record more portable and secure.

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and cumbersome task for a car owner- which generates unnecessary traffic and fuel wastage. The Idea should be like an Efficient Parking management system where a user will be shown parking spots near to his destination. They should make a web application which talks to a web service and fetches dynamically the nearest parking places. •FinTech We expect them to make an open source API for banks which would empowers financial institutions to securely

and rapidly enhance their digital offerings using an

a city. And finding a parking lot is the most irritating

ecosystem of 3rd party application and services.

·AI/ML

In this we expect to make something like an online Examination System with one added Artificial Intelligence that is it even checks brief answers manually typed by the student along with option ticking and gives appropriate marks to the user. This is done by comparing the user written answer with the real answer stored in system database.

We expect them to make like Smart Share. They should

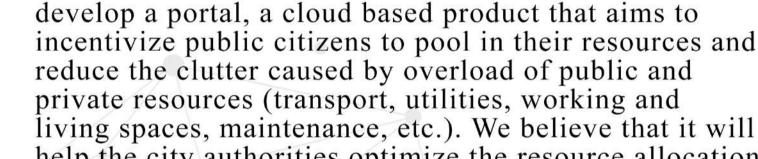
•You have to share the codebase of your project in a zip

•Separate criteria will be made while judging the project

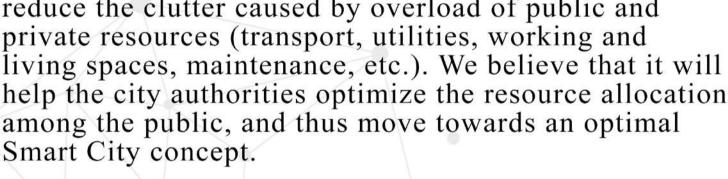
•Links to all the code and third party API's, datasets you

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Cloud



under each domains.

folder with the judging team.

Smart City concept.

Rules & Regulations

•Team size must be between 1-4.

•On spot team registrations are allowed.

### What you have to submit

have used.

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ticipant consisting the following:

•Demo link of your hosted application.

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you plan to improve it beyond the hackathon. •You can put any number of images in a zip file. The image must be JPG or PNG file upto 3MB. For best results, crop to 630x320px or 16:9 ratios. •Upload all your source files in zip, apk, etc. formats,

•Importance to the problem - what is the impact of the problem for smart city?

Visible only to you, your team-members and judges.

•Implementation and quality of final product/output - e.g. how well does the product work?

•Technical design and architecture - e.g. choice of dataset,

- •Visual design and Usability quality of UX and UI.
- **Prizes**
- •Prizes worth 1 Lakh.
- ·Certificates.

features, API.

Judging Criteria

reduce the clutter caused by overload of public and private resources (transport, utilities, working and living spaces, maintenance, etc.). We believe that it will

•Final report document should be submitted by each par-•Write about the objective of your hack. What you had dreamt of and what you have built. Also mention how

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•Project idea - creativity of proposed solution and scope.

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"There's a way to do it better - find it."

Got some innovative ideas? Think your idea can fix a problem? Think they're worth a future?

siNUsoid v2.0 invites all the young inventors and entrepreneurs to Makeathon to work with similar minds, innovate, collaborate and show us your version of the future. Makeathon strives to construct a scientific and creative attitude among young minds.

Students are coming in from all around the Delhi NCR and Jaipur region on \*date\* with their prototypes and models, providing solution to many present and potential socio-economic problems.

Come imagine the future and fill in the gaps.





### Contact us

nusinusoid.org.in sinusoid@st.niituniversity.in 7340598653 (Piyush Singhania)











NIIT university's annual Tech-fest is celebrating its 2nd birth-day this year.

Tune in for reverberance with Sinusoid'18, and get ready to experience an ecstasy of eventsin fields ranging from Robotics to Competitive Programming.

There's definitely fun in coding all night and day in Hack-a-thon; there's a kick when your robot wins a race or a boxing championship; and there's a thrill of evading the security and solve the clues in a CyberHunt.



# **ABOUT NIIT**

With Dr Karan Singh, Rajendra Pawar and Vijay Thadani as the founding fathers, NIIT University, Neemrana, established in 2008, is one of the fastest-growing educational institutions in India.

Inheriting close to three decades of NIIT's rich experience, know-how and global reputation, NIIT University is a not-for-profit institution which will soon be one of India's top rated institutions.

# EUENT LIST

### Workshops

Python Cyber Security Artificial Intelligence Theatre

### Informals

Open MIC TALF LIME\_WIT Poetry

### Pre-Fest

Code-Amplitute
Cryptic Hunt
Intern Fair
Coder of the Fortnite
Meme Competition

### **On-Fest**

Code-Jam Hack-a-thon Debate Mr. Googler Error Stack Capture the Flag

# ROBOT-A-LOT

Robo-Race

#### Robo-Soccer

Crux of the event: Build a robot whose task is to push the opposing robot out of the circular ring or flip it over. Different robots compete one-on-one against each other in a knock-out tournament.

- Car should be 12v dc supply or less.
- Dimension should not exceed 30X30 cm
- It can be wired or wireless
- Ready made car is not allowed\*
- Track may consist of various types of huddles.
- Judgment would be based upon time taken to complete the track and tackling hurdles. \*If you are in ON-SPOT category.

1 Ready Made: The contestants can bring ready made cars.2 On Spot: The contestants have to build their robo cars on

the day of event at allocated location

### **WORKSHOPS**

At NIIT, we believe that training and research are a very crucial aspect of an individual's growth. And with SiNUsoid organising these workshops, it is surely a once in a life time opportunity, with such basic yet important topics and the names attached to these workshops as your speakers is just mind blowing.

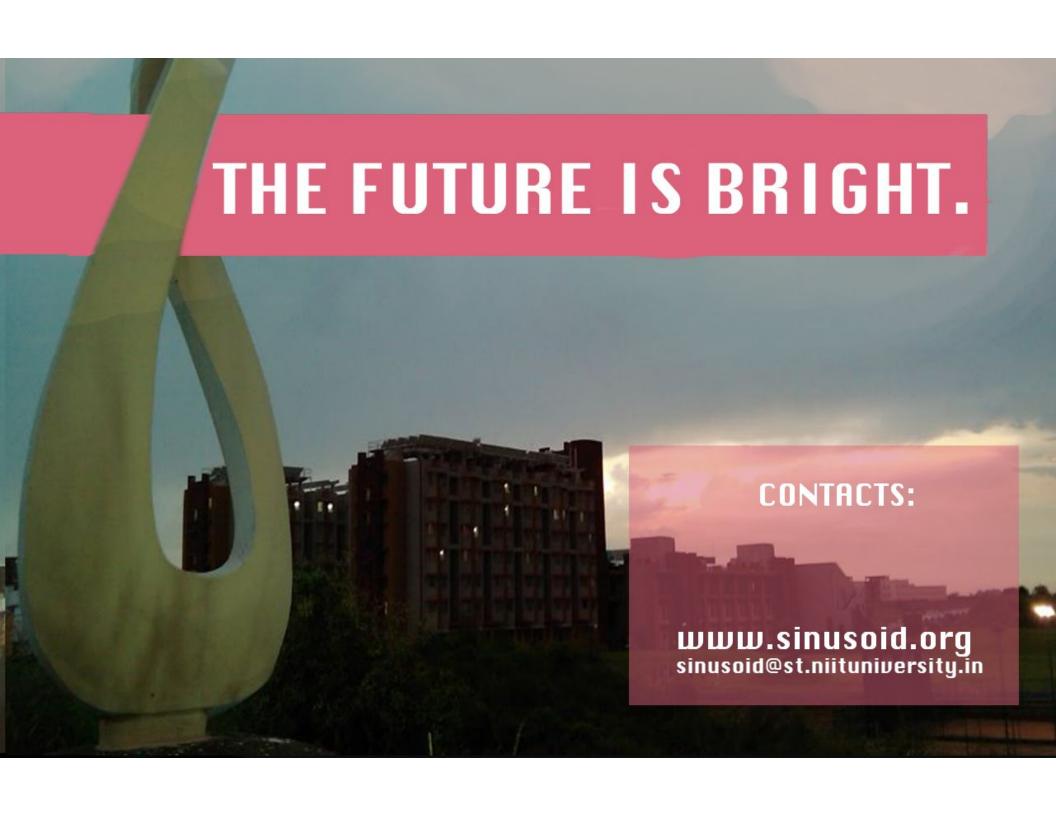
Trust us you would not want to miss this.

### INTERN FAIR

Who wants to be average? Who doesn't want a great CV. Who doesn't want a good job, a better salary and a better life. If you can relate to these lines, and are confused as to where to start from.

Congratulations, your wait is over, with intern fair at SiNUsoid, NIIT you can hunt down your dream internship on the go.

You'll be surprised by the level of satisfaction you'll get after completing one.



#### Mamta Pankaj Jain

From: Shivendra Mathur

Sent: Sunday, July 30, 2023 12:24 AM

To: Mamta Pankaj Jain

Subject: FW: Lohri celebration begins... **Attachments:** IMG-20200112-WA0000.jpg

From: IngeNUity Fest <ingeNUity@st.niituniversity.in>

Sent: Sunday, January 12, 2020 7:15 PM

To: All at NU Student < Allatnustudents@st.niituniversity.in>

Subject: Lohri celebration begins...

Hey Folks,

Keeping the energy of the kite flying festival alive, IngeNUity brings you a reason and an escape to celebrate the spirit of Lohri.

As the Punjabi families share and forward it on WhatsApp,

"Twinkle Twinkle yaaran di car,

Khadke glassi in the bar,

Panjabi Bhangra te makkhan-malai,

Tuhanu Lohri di lakh-lakh vadhai."















IngeNUity brings you a host of events to dazzle your evening. Open mic, Musical performances, DJ night, Food and a vivid, momentous, everlasting, imperishable, everfading Bonfire.

So join us at **Bowl Area, 7:15pm** and make this evening Rocambolesque!!! 😂



With some unending, incomparable and quintessential Love, **Team IngeNUity** 

#### Mamta Pankaj Jain

From: Shivendra Mathur

**Sent:** Sunday, July 30, 2023 12:26 AM

To: Mamta Pankaj Jain

**Subject:** FW: Invitation for IngeNUity'19- Elysium, The Rhapsody Revives

From: IngeNUity Fest <ingeNUity@st.niituniversity.in>

Sent: Friday, March 8, 2019 1:12 PM

To: All at NU Student <Allatnustudents@st.niituniversity.in>; All at NU Faculty <Allatnufaculty@niituniversity.in>

Subject: Invitation for IngeNUity'19- Elysium, The Rhapsody Revives

