

Department of Computer Science & Engineering  
IIT (BHU) Varanasi



code**Fest.**

**BROCHURE**

26<sup>th</sup> - 28<sup>th</sup> February



[www.codefest.tech](http://www.codefest.tech)

# INTRODUCTION

Are you: A coder, thinker, designer or technology enthusiast?  
Welcome aboard.

## **Codefest: The annual coding festival of the Department of Computer Science and Engineering, IIT-BHU**

Nothing in this era is untouched by computers and technology. Raw code is the new way of life and is the soul and quintessence of machines!

Codefest is an umbrella of competitive events across various fields and disciplines of Computer Science and Technology, and aims to promote awareness and appreciate the diversity & importance of the fields of Computer Science and Technology. Being second to none, Codefest is rendezvous for all kinds of learners and aims to challenge them in every dimension to take them to the next level.

The history dates back to March 2010, when the first Codefest was organized. Being one of its kind, Codefest'10 saw 2354 registrations from 680 institutions across 59 countries, which increased to 6742 participants from 88 countries in 2011. With each year, we have grown and this time we are back with a bang! With the progressive changes and deepened roots, we bring you an event bigger than ever, Codefest'16!

The events cover the areas of Algorithmic Programming, Application Development, Math and Logic, Open Source, Cryptography and Security, Machine Learning, Artificial Intelligence, Cyber Security, Ethical Hacking and many more! Apart from these competitive events to challenge the limits and to set the stage ablaze, Codefest also includes workshops, seminars and webinars to provide a decent exposure for building a solid base for the keen minds. Codefest is a perfect platform for all kinds of programming enthusiasts and an excellent example of education blended with immense fun.



## ***A Few Words...***

It is a matter of great honour to revive a legacy left over a few years ago. Codefest was founded at the Department of Computer Science and Engineering, IIT BHU Varanasi in 2010. It was a completely online coding festival that was appraised by the most prominent coders from 59 countries across the world. This year, we bring to you a bigger, better and more promising fest, revamped with an array of exciting events.

Codefest'16 has been conceptualized in an effort to provide fresh computer science enthusiasts with an opportunity to explore the various fields in computer science so as to enable them to discover their interests, and to provide seasoned programmers with challenging competitive problems to hone their skills and feel the heat as they compete for the ultimate glory.

Codefest aims to provide an international platform to budding techno-geeks to showcase their talent while keeping the bar high enough for even the best to overcome. It will be a one-of-a-kind fest with events being almost completely online.

It will be a great honour for us to partner with you and have you as part of the Codefest family through sponsorships, valuable suggestions, technical inputs and feedbacks. Thus, on behalf of the Department of Computer Science and Engineering, IIT (BHU) Varanasi, we invite you to endorse this great extravaganza by becoming a part of the festivities and look forward to working with your organization at Codefest'16 and in all our future endeavors.

Prasoon Varshney  
Convener, Codefest'16.



## ***Title Sponsor***

The benefits accorded to Title Sponsor are as follows :

- There will be only one title sponsor of Codefest'16. Your name & logo appears as "Department of Computer Science and Engineering and <title sponsor name> present CodeFest '16".
- With every mention of Codefest '16, your name and logo will also be displayed.
- The title sponsor shall be allowed to design and add an event of their choice, tailored specifically to their requirements.
- Publicity in the form of 1000+ posters sent to around 200+ colleges across India.
- Publicity on online forums of various schools and colleges through our dedicated network of campus ambassadors.
- Publicity through our Facebook and Twitter pages.
- Publicity in the form of print media.
- Prominent appearance of your name and logo on the Codefest website along with company profile.
- A separate landing page as provided by you will be added to the Codefest'16 website to display the products/events of your company.
- Due mention of your name and logo on every certificates and goodies distributed to participants.
- Specific mails to participants publicizing your products.
- You will get access to the database of all the participants and other visitors to the website of Codefest'16.
- You also get exclusive access to the participants' details and solutions in the event organised by you.
- You also get all the benefits of an event sponsor.
- An excellent platform to find world's best computer geeks & offer them internships and jobs.



## ***Associate Sponsor***

The benefits accorded to Associate Sponsors are as follows :

- Your name appears under the associate sponsor's column everywhere.
- Publicity in the form of 1000 posters sent to 200+ across India.
- Publicity through our Facebook and Twitter pages.
- Publicity in the form of print media.
- Prominent appearance of your name and logo on the Codefest website along with company profile.
- An excellent platform to find world's best computer geeks & offer them internships and jobs.
- All participants details in all contacts would be provided to you.
- You also get all the benefits of an event sponsor.



## ***Event Sponsor***

The benefits accorded to Event sponsor for each event are as follows :

- As an Event Sponsor, you could discretionarily tailor any one of the events given below
- Association of your name and logo with the particular event with exclusive rights.
- Privilege to design and conduct the event according to company's requirement.
- Publicity in the form of 1000+ posters sent to 200+ colleges across India.
- Publicity through our Facebook and Twitter pages.
- Publicity in the form of print media.
- Publicity of your company's products through prizes and goodies.
- Prominent appearance of your name and logo on the Codefest website along with company profile.
- An excellent platform to find world's best computer geeks & offer them internships and jobs.



# Events



Manthan



Appathon



Enigma



CTF ( Capture The Flag)



Decipher

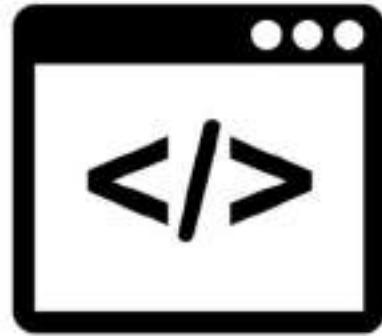


Mathmania



Perplexed





## **Manthan**

### Algorithmic Challenges

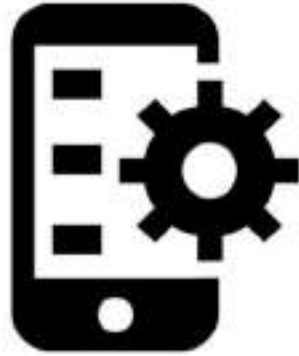
The challenge invites programmers to battle out their coding chops and show off their competitive programming skills. Manthan, through its unique array of comprehensive problems, puts the contestants through a gruesome test, from which only the ones truly adorned with an intricate and intimate mastery of data structures and algorithms emerge victorious!

#### **Features :-**

- Assorted problems which challenge each aspect of a proficient coder's arsenal.
- Code away in the programming language which best suits your needs and the needs of the solution.
- Problems simple enough to be solved ad-hoc but formidable enough to be exigent.
- As much as it's about the fastest solution, it's also about getting there the fastest. Have a look at the clock – it's ticking.







# Appathon

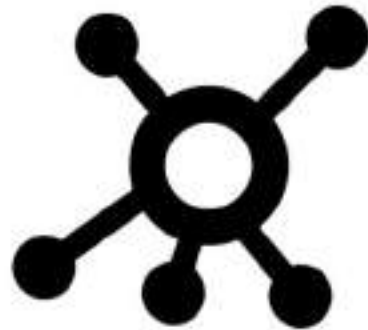
Cross-platform AppDev

Are you ready to invent the future?

Appathon is an application development contest. The application maybe a mobile app on any platform Android, Windows, iOS, or even a webapp.

CodeFest brings to you the perfect opportunity to give wings to your crazy ideas. The possibilities are limitless. Break down APIs. Or build up from scratch. Do something you've never done before. Appathon challenges you on speed, ingenuity and innovation. Move quickly — you only have 24 hours. Design well to impress all. Charge your laptops, grab your doses of caffeine and hack your way to glory!





# Enigma

Machine Learning

“We are drowning in information and starving for knowledge.”

The last decade has seen a vast increase in the quantity of data and has led to a demand of making predictions by analyzing data. This gave rise to a field of study called Machine Learning wherein computers learn to do stuff without being explicitly programmed. From driverless cars to personalized recommendations, voice search to automatically organizing your photos, Machine Learning is everywhere now.

Recognizing this, Codefest presents Enigma, an unprecedented competitive forum to design innovative models that train themselves to solve specific real life problems.





# Capture The Flag (CTF)

## Cyber Security

"If you give a hacker a new toy, the first thing he'll do is take it apart to figure out how it works."

CTF invites all hackers to show off their skills on a global platform. It provides students with an opportunity to tackle computer security problems similar to real world scenarios. It aims to engage hackers, beginners and experienced alike in creative exploration of the real world computer security arena.

This contest will let you learn and understand the importance of various roles and ramifications in the field of cyber security and will also help you appreciate various common security practices which are followed across the globe.





# Decipher

## Cryptography

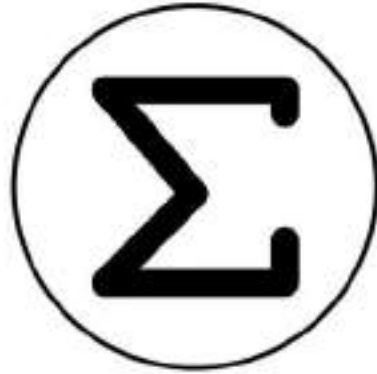
Abstraction is one of the greatest visionary tools ever invented by human beings to imagine, decipher, and depict the world

Bring out the Alan Turing in you, put on your thinking hats and get ready for CodeFest's cryptography event Decipher! The participants shall use their deducing, cryptography and programming skills to decrypt a set of messages provided. May the best Decoder win.

### Features :-

- Intelligent encryptions to test decryption abilities of a decoder.
- Program your way out or solve it in the comfort of your own mind palace, using logical and analytic skills alone.
- Encryptions which require a generic problem solving approach to decrypt, rather than merely using previously learnt algorithms..





# Mathmania

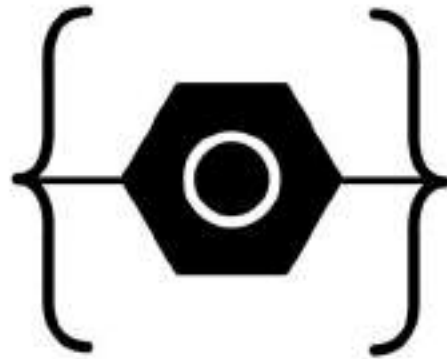
## Math Challenges

"It's magic until you understand it and its mathematics thereafter"

Mathmania is a mathematical puzzle contest where a sound knowledge of mathematics together with computational thinking will be essential to solve problems. The motivation behind Mathmania is to provide a platform for the inquiring mind to delve into unfamiliar areas and learn new concepts in an exciting way.

Mathmania brings forth brainstorming mathematical problems, quick hacks and puzzles, right decision to a situation and all the numerology you can think of. So put on your thinking caps and gear yourselves up to one of the most enthralling events of Codefest.





# Perplexed

Constrained Programming

Perplexed! is an innovative programming competition which aims to test the ability to optimize a solution to problem based on different constraints. Perplexed! is an individual event which will be a live contest of 5 hours having 6-8 problems. For each problem, the solution will have to satisfy a unique set of tight constraints like memory limit, time limit, character limit, etc.



## ***Media Partner***

Your company will be declared as Media Partner of Codefest '16.

The Media partner would be expected to publicize Codefest wherever possible through its products.

- Prominent appearance of your name and logo on the Codefest website along with company profile.
- Publicity through our Facebook and Twitter pages.
- Publicity in the form of print media.

## ***Contact Us***

**Prasoon Varshney**

Convener

Ph: +91 9871108733

prasoon.varshney.cse13@iitbhu.ac.in

**Shubham Gupta**

Corporate Relations Head

Ph: +91 9451103575

shubham.gupta.cse11@iitbhu.ac.in

**Ayush Mehta**

Co-convener

Ph: +91 9005601188

ayush.mehta.cse13@iitbhu.ac.in

**Siddhant Sharan**

Corporate Relations in-chief

Ph: +91 9654665343

siddhant.sharan.cse13@iitbhu.ac.in

You can also reach us at:

**codefest@iitbhu.ac.in**





**Code For Glory**  
[www.codefest.tech](http://www.codefest.tech)