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GITA



Newsletter

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Bhubaneswar

SEARCH DIRECTIONS LOCAL

Driving directions
Gandhi Institute For Technological Advancement

Route
20 min
12.3 km

1. Depart Baramunda Bus Stand Road
2. Turn left onto NH-5 Service Road / Service Road
3. At exit NH-5 Service Road, take ramp for NH-5 / AH-45
4. Make a U-turn at Dharam Vihar
Pass BANK OF BARODA on the right in 3.7 km
5. Turn right onto road
6. Gandhi Institute For Technological Advancement
The last intersection is NH-5 / AH-45

bing

from the Principal's Desk

Our Patrons



Dr. Satya Prakash Panda
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Dr. Chandra Dhvaj Panda
Secretary



Mr. Biranchi Narayan Panda
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Chief Editor

Prof.(Dr.) M.K. Roul
Principal, GITA Bhubaneswar

Editor

Prof. Saqti Mohanty
Department of Physics



It gives me immense pleasure to pen a few words as a prologue to our News Letter TECHNOJYOTI exclusively meant for executing the latent talent of our GITA family which bears immense potential of sharpening the creativity, happenings and on-campus activity. I congratulate all the contributors and the editorial board for bringing out this aesthetic piece studded with information and knowledge. Empowering students for their all round development through education and co-curricular activities is our sole and cherished motto.

Today education does not mean merely acquiring knowledge but demands acquisition of knowledge and skills, building character and improving employability of our young talents and preparing them for future leadership. GITA, Bhubaneswar presents a happy blend of traditional and modern education where knowledge is imparted to the students so that they may occupy a better place in the modern competitive world and develop all round personalities retaining the beauty of mind and intellect as well as of soul. I really feel proud of our Alumni who are holding responsible position in social, political and economic life of the nation. All these could come into reality only for the dedicated and strenuous efforts of the able managing committee, hardworking and experienced faculty and also with the whole-hearted co-operation of the people of the locality to whom I am highly grateful. The present times, marked by a chaotic situation, cut - throat competition and insensitivity towards others, demand rethinking on how best education can contribute for a peaceful coexistence of all. No one can deny the pivotal role education has to play in this century to bring about the much desired catharsis of our society plagued by violence, hatred, anger, frustration, lawlessness and uncaring feeling for others. I wish all the best for all our students, and the members of the institution who reiterate their aims at providing the best in academic and extra-curricular fields. We must believe that success is inevitable where these exist- Foresightedness, Firm Determination, Hard work and Discipline.



STAY SNAKE SAFE...

An App That Can Help Snake Bite Victims

SUNDAY POST January 5-11, 2020

TECH

On a lifesaving mission

With snakebites claiming an increasing number of lives every day in Odisha, a group of technocrats from a Bhubaneswar-based engineering college have developed a mobile application to help snakebite victims

BIJAY MANDAL, OP

Brunnar Sahoo was working with a security agency and owned a small patch of land at Sai Vihar, near Kalinga Studio on the outskirts of Bhubaneswar. Although he was given free accommodation by his employer, he wanted to construct a house on his own land so that he could shift his family to Bhubaneswar. On an evening when he was at his outhouse, he was bitten by a venomous snake. He approached a couple of neighbours to take him to hospital. But in the absence of made members at their home, the neighbours could not help him much. Finally KLM Dora, a local rushed him to Capital Hospital after almost half an hour. However, it was too late as the doctors declared him dead on arrival.

If this is the scene at the state capital, the fate of snakebite victims in rural and remote areas of the state can be easily imagined. To make things worse for victims, a large number of people, due to lack of awareness and superstitions, prefer to take help from faith healers or sorcerers instead of rushing the victims to hospitals. No wonder, the state government has declared snakebite as a 'state specific disaster' since April 1, 2015 with the number of casualties exceeding the number of deaths in other disasters like flood, cyclone, and lightning.

In instances of snakebite, identification of the species is extremely important to administer the appropriate drug. However, a study published in the *Journal of the Association of Physicians of India* reveals that standard anti-snake venom (ASV) injections are given to most of the victims, since it is difficult to distinguish the species of snake at the PHCs due to lack of experts, which are not effective for all poisonous snakes found in Odisha.

In view of the staggering number of incidents of snakebite deaths, especially due to non-identification of snakes, a group of second year BTech students from Bhubaneswar-based GITA Engineering College, have developed a unique mobile application which can help identify the snake species and facilitate ambulance facility to shift the patient to the nearest hospitals.

Abhinav Prakash, one of the seven engineers involved in the development of this application, says, "We are taught to come up with out-of-the-box ideas. We applied ourselves to address

this particular problem of snakebite that proved to be a major cause of concern in our country specifically in coastal areas of Odisha and other states. Machine Learning (ML) helped a lot to experiment with our ideas. We are planning to apply for a patent for it. We are adding a few more features to make the app more user-friendly."

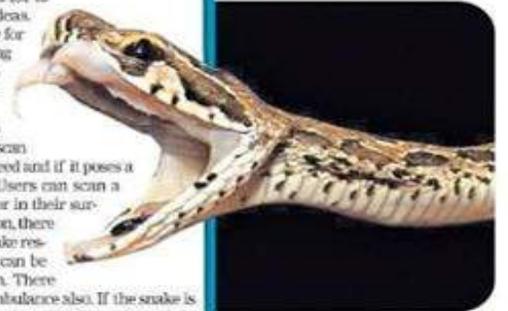
The AntiVenom App uses Machine Learning to scan and identify a snake's breed and if it poses a threat to human lives. Users can scan a snake if it is near them or in their surroundings. Upon identification, there is an option to call the snake rescuers, so that the snake can be released in its habitation. There is an option to call the ambulance also. If the snake is still around, the user can identify the snake species and inform the hospital to keep the required ASV vial ready in advance to prevent delay in start of treatment, the developers claim.

The uniqueness of the app is that it can work smoothly on even low-end smartphones. It doesn't require any Internet connection, hence can be used in rural areas where there is low network coverage or no Internet connectivity. Most importantly, it doesn't generate any ads, nor does it get funding from any source. It has been designed for public welfare and an open source project (OSP) which means anyone with an intention to innovate can contribute to make it better, they added.

MK Rouf, the principal of the college says, "I am proud of my students' creative efforts to put Machine Learning into the development of this AntiVenom App. It will definitely help in quick rescue and treatment of snakebite victims. We are there to extend help to these projects through many research schemes."

Dean (Admin) PK Routray says, he feels great about the effort made by the students. This app really addresses the real life issues of snakebite which is quite rampant in major parts of our country.

Saqui Mohanty, a professor of the college, said, "To reach out to the common people in society is the beauty of science and technology. I am really impressed by the way these young minds are pitching and executing such an idea to address to the acute problem of snakebite that claims so many lives in rural and urban Odisha."



MAIN FEATURES

- It can scan and identify snake species and ascertain whether it is venomous.
- The App scan any image from the camera or from the gallery.
- Quick option to contact the Odisha Ambulance Helpline.
- Option to contact the Odisha Snake Helpline.
- Important and useful messages displayed on the home screen regarding snakes and snakebites.
- Users can download the App from Google Play Store.
- The App is absolutely free and available in English and Odia languages.



Team members (From Left): Suraj Singh, Ankit Jaiswal, Gauri Shankar Panda, Aparna Singh, Alok Kumar, Raj Shankar Tiwari and Abhinav Prakash

KICKING OFF...

Gita Vintage (Alumni) Bangalore Chapter



LIFE IS BEAUTIFUL...

An Event On Prevention Of Suicide



Think Tank

The Deprived

Sahana Banerjee, 3rd Year, CSE

The first trait of being a human is being self-centered. As humans we only spend time think to resolve our life issues, find ways to conquer our dreams and positions of authority and thrive as the winners in this society. Although God has gifted us with wonderful eyes but all we do is to use them watch the beautiful scenery and discuss like a philosopher as to what or who might have created it and cherish the magnificence of it. Not for a single moment do we take the pain to actually open our eyes and look towards those that are deprived.

When I say deprived well ..I mean to indicate all such people who have been denied the most important right-"The Right to LIVE". Yes friends , **there exists not just one or two but many thousands and thousands of people whose life begin in the dark corners of the society and they come bearing a bleak future.** They live through hell and when they try coming to light it is us, the blessed ones, who mock at them, look at them in despair, talk about their lives as if we are omnipotent and omnipresent and try to scrutinize their lives without knowing absolutely anything about them. The lives of the prostitutes and the hawkers , the beggars on trains , the child laborers, the homo and bisexuals forced into prostitution and the painful journey of theirs which forced them or compelled them to take such professions of slavery, disgust and oppression have been brought in front of us time and again but yet we continue to remain immune to them and dishonor them as humans.

I have not included the real life stories of some of these brave people who have managed to breakthrough the social stigma and narrate their pain to the public because my motive is not to present a real life story which would become a tale but to imbibe a sense of respect and honor for the people living in this section of society and devise ways for them so that even they can avail the right to live and as humans get an equal treatment and respect from other humans. " When one gives respect, he/she earns it too". This should be the notion. None of us know when one of them might help us in our need; for we cant forget the sacrifice of the hawker who took a shot on his chest to protect the Indian army man during the 26/11 attack on The Taj.

Tech Talk

Testing of Object-Oriented Software

Er. Chinmaya Kumar, GITA Alumnus

An important constituent of software quality assurance process is testing. Testing has become an important part of every software development process on which companies devote considerable time and effort. In fact, software testing has been acclaimed to be the most time and effort consuming phase in any software development process. Object-oriented programming has become very popular as it helps increase programmer productivity. For object-oriented programs traditional software testing is insufficient because of their fundamentally different characteristic. A large number of research results are available on testing traditional software, but research results on effective testing of object-oriented software has scarcely been reported in the literature.

The object-oriented paradigm has become extremely popular in the areas of programming languages, databases, user interfaces, specification and design methodologies. **Object-oriented software consists of components (objects) that interact with each other to carry out specified functionalities of a software system.** Reuse of software components and easier development and maintenance through enhanced modularity and data encapsulation are systematized through the principles of object-oriented software development. However, features such as dynamic binding, inheritance, and polymorphism increase the complexity of the relationships among the programming units. This increased complexity of relationships has brought new challenges to integration, testing, and maintenance of the object-oriented software system. Several features of object-oriented programs such as state-based behavior, message paths, polymorphic binding are extremely hard to extract from static code analysis. However, this information is explicitly available in the analysis and design models .

Model-based testing is the application of Model based design for designing and executing the necessary artifacts to perform software testing. This is achieved by having a model that describes all aspects of the testing data, mainly the test cases and the test execution environment. Usually, the testing model is derived in whole or in part from a model that describes some (usually functional) aspects of the system under test (SUT). The model describing the SUT is usually an abstract, partial presentation of the system under test's desired behavior. The effectiveness of model-based testing is primarily due to the potential for automation it offers. If the model is machine-readable and formal to the extent that it has a well-defined behavioral interpretation, test cases can in principle be derived mechanically.

TECH ACTIVITY...

TEQIP-III

TEQIP - III is a BPUT sponsored International Conference on Recent Advances in Computer Science, Soft Computing and Information Technology, which was held in our campus in association with VTU & AKU from 20th - 22nd December, 2019.



Address by
Prof.(Dr.) Sunil Sarangi



TECHNOLOGY TOGETHER ...

NIPF 2020 AT A GLANCE



GITA CULTURAL WEEK

Akansha, Ahwaan, Innovizon

Gandhi Institute for Technological Advancement (GITA) recently celebrated its Annual Cultural Week in the month of March. The fest week is a chance for the students to showcase their talents on stage. It's a welcome break for the students who for these 6 days put their books aside and don party hats.

The fest week celebrates youth and vigor in all its form be it physical, intellectual or extra-curricular talents. The fest week was inaugurated with a lot pomp and splendor by Prof. (Dr.) Chandradwaj Panda, Hon'ble Secretary, Sri Biranchi Narayan Panda, Hon'ble Vice Chairman; Dr. M.K.Roul, The Principal; Cdr. (Dr.) P.K. Routray, the Dean Administration; Prof. Kunal Pattnaik & Prof. Saqti Mohanty, Vice-President Cultural Society.



a Facelift

