



VASIREDDY VENKATADRI INSTITUTE OF TECHNOLOGY
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NBA Accredited: B. Tech Programs– CE | CSE | ECE | EEE | ME | IT
DEPARTMENT OF INFORMATION TECHNOLOGY

IT PRAGNA – Department Magazine

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TOUCHLESS TOUCHSCREEN TECHNOLOGY

Touchless Touchscreen is technology that uses gesturing as form of input. It does not need touching of screen rather system detects hand movements in front of it by making use of various sensors.

History:

Americans have long been enamoured by touchless technology, dating back to the 19th century when the first miniature remote control boat was invented. A few decades later, entrepreneurs started discovering remote-control solutions that could ease daily chores, which led to the creation of the automatic garage door opener

Over time, touchless technology has become more sophisticated and has weaved its way into every aspect of American life - from the home to retail stores and the workplace.

Touchless Technology:

Voice activation:

Voice recognition software analyzes sounds and performs tasks based on the information that is given to it via a voice (e.g., Apple's Siri, Google's Home, or Amazon's Alexa).

Gesture recognition:

Another common form of touchless technology is gesture recognition. Users can make simple gestures to control or interact with devices without physically touching them.



Face Detection:

Measure the physical characteristics of a person to verify identity. (e.g., eyes)

QR codes/barcodes:

On-demand mobile quick response (QR) codes provide instant access to information. A QR code is a version of a barcode, an open-source technology that is easy for mobile apps to scan. QR codes can direct users to download a mobile app or visit a website.

Ways to Implement Touchless Technology Across Industries:

In Retail Stores:

During the pandemic, BOPIS (buy online, pickup in-store) service and contactless delivery made it possible for consumers to continue patronizing their favourite retailers with minimal physical interaction.

In Healthcare:

Touchless technology is especially vital in a healthcare setting. To help alleviate people's anxiety, healthcare facilities have started eliminating touchpoints and implementing voice recognition or activation technology.

In Public Spaces:

Touchless technology can streamline public buildings and stadiums' security and access control and enhance digital signage in theatres, hotel lobbies, and libraries. QR codes can be used for contactless delivery, intelligent lockers, touchless menu apps, and touchless feedback forms.

Benefits:

Reduced costs:

Any costs accrued from implementing touchless technology are balanced by the reduced risk of health-related costs and fines.

Energy savings:

Touchless technology is more energy efficient because it shuts off automatically rather than waiting for human intervention, which reduces energy waste and costs.



Article by: Dr. Kishan Kumar

Professor

IT Department

React Js

In the modern era, the world cannot function without mobile and web applications. Everything has gone digital, including the ordering of food, transportation, and bank transactions. The effective frameworks that offer a smooth user experience ought to be commended. React is one such capable frontend library.

React is an **open-source, front end, JavaScript library** for building user interfaces or UI components. The library became available in May 2013 and is currently one of the frontend libraries for web development that is most frequently used. It is maintained by Facebook and a community of individual developers and companies. React can be used as a base in the development of single-page or mobile applications.

History:

Software engineer at Facebook Jordan Walke developed React and released an early version of it under the name "FaxJS." XHP, a PHP HTML component library, had an impact on him. In 2011, it was first implemented on Facebook's News Feed, then in 2012, it was implemented on Instagram. At JSConf US in May 2013, it was made open-source.

As an alternative to React's previous rendering strategy, Stack, Facebook introduced React Fiber on April 18, 2017. React Fiber was to serve as the basis for all further feature development and library enhancements. React 16.0 was made available to the general public on September 26, 2017. React 16.8 was made available to the public on February 16, 2019, and it featured React Hooks. The first major release of React 17.0 without significant changes to the developer-facing API was made public by the React team on August 10, 2020. React 18 was published on March 29, 2022, including a new concurrent renderer, automatic batching, and support for Suspense server-side rendering.

Why React?

React, in contrast to JavaScript, where code can frequently get quite difficult very quickly, takes less coding and delivers greater functionality, making it simpler to construct dynamic online apps.

React employs Virtual DOM, hastening the development of web apps. Instead of updating all the components again like traditional web applications do, Virtual DOM analyses the previous states of the components and updates just the things in the Real DOM that were modified.

Any React application is built from components, and a single app often comprises of several components. The application's development time can be significantly slashed because to the reusability of these components, each of which has its own logic and controls.

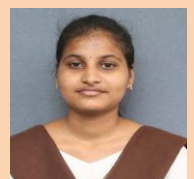


Data flow in React is unidirectional. As a result, developers frequently layer child components inside parent components when creating React apps. It is simpler to troubleshoot issues and pinpoint the exact location of a problem in an application when data is flowing in a single path.

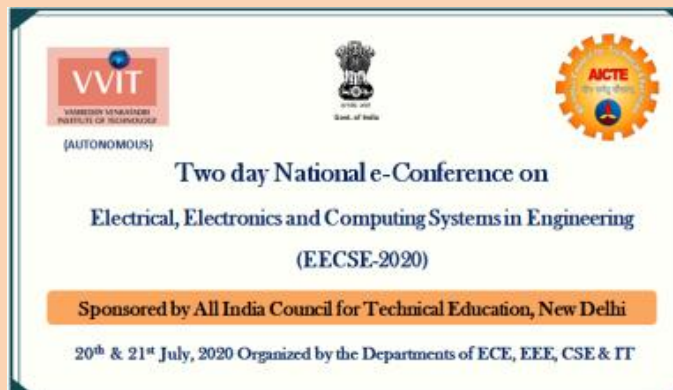
Although we already know that react is used to create web applications, there are other things it can be used for. Beautiful mobile applications may be made using the wildly popular React Native technology, which was derived from React itself. React may therefore be used to create both web and mobile applications.

Since React mostly combines fundamental HTML and JavaScript concepts with some useful enhancements, it is simple to learn. comprehend React's library, just as it does with other tools and frameworks.

Article by: A. Bhumika
18BQ1A1209

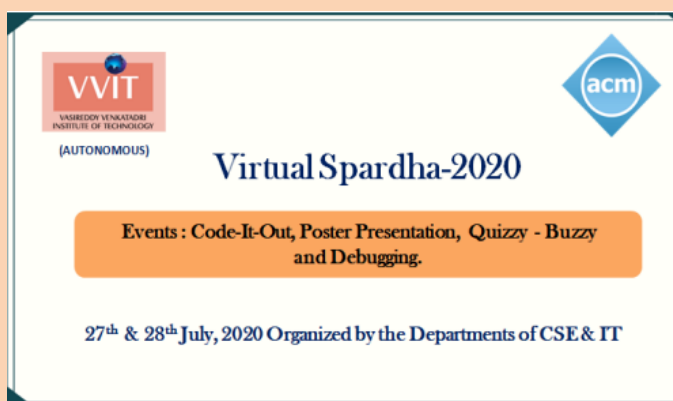


e-Conference on EECSE-2020



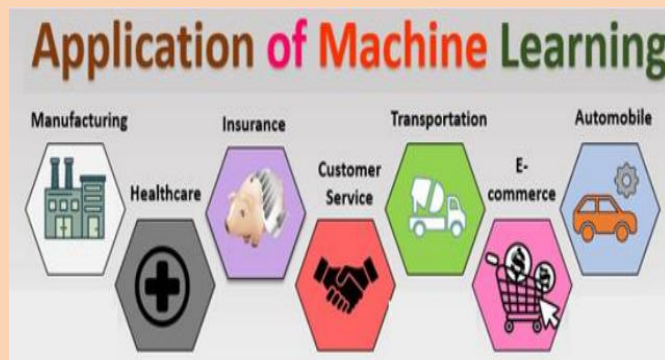
A two-day National E-Conference on Electrical Electronics and Computing Systems in Engineering (EECSE-2020), sponsored by AICTE, under the theme “Application of Power Electronics in Renewable Energy Systems and Electrical Drives using IoT”, scheduled during 20-21 July 2020 as informed by Sri VasireddyVidyaSagar, Chairman of VIVA-VVIT Institutions.

“Spardha-2020”



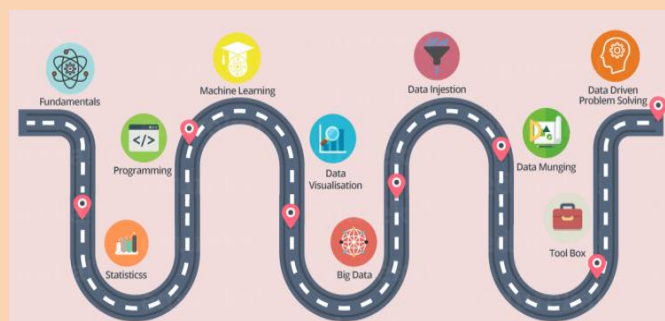
VVIT has been conducting this 2-day national-level technical fest every year as an annual technical event under Association for Computing Machinery (ACM), with an auspicious motive to provide platform for the all-round development of students and to showcase their technical abilities.

Workshop



Keeping in view, the pandemic situation caused by Covid-19, The Chairman of VIVA-VVIT Institutions, SriVasireddyVidyaSagar has taken the initiation of conducting virtual workshops for III B.Tech and IV B.Tech students as they were off track due to cancellation of classes. Sri VidyaSagar, along with all the HOD’s and Dean’s had brainstorming sessions and took the decision to channelize the student’s potentials. The final outcome is, after having discussions with IBM Company using Cisco Webex Platform, the virtual workshop.

Add-on Course



Vasireddy Venkatadri Institute of Technology, Nambur, organized a nine weeks course on Data analytics with R, scheduled during the academic year 2020-21, October 2020 as informed by Sri Vasireddy Vidya Sagar, Chairman of VIVA-VVIT Institutions.



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18BQ1A12C0



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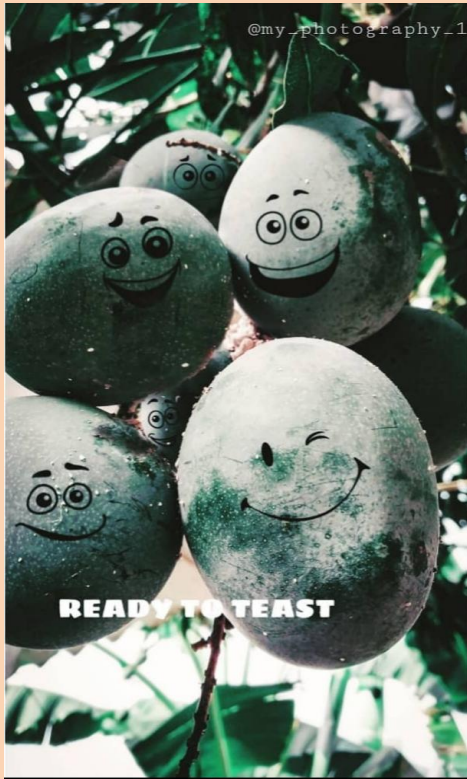
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The day I joined in VVIT decided this is going to be my place forever. Firstly, Infrastructure took my heart. It took me little time to settle but when I started participating in Friday clubs it was easy to me.

Lectures in VVIT are completely career focused which helped me to chase my dreams to place in amazon. Technical events helped me lot to enhance my skills in coding. I would definitely recommend this institute to my friends and family as an amazing institute.

The faculty is quite experienced. They are very easy to reach and available to clarify my things! The placement in the college is good with around 90% of the students got placed in MNC's with at least 1 offer. I got placed in the 3-2 semester. The average package offered is around 3.5L. My interview went so smooth. I was little tensed, but my faculty motivates all of us to be confident.it gives an environment to grow yourself educationally and personally.it just about grabbing an opportunity.

The best part about 'y college is annual fest which held in the month of December every year. I invited my friends from other colleges they took apart in VVIT events. SAC will take care of everything, and student voice is always taken into opinion. The doors are always open to participate in any events. I have had so much fun with my friends. We used to have movie promotions where we enjoyed out of box.

I'm gratefully thanks to my institute for their guidance and support all the way. And here I am with no regrets to be apart in our college. This great experience reminds me forever.



G. Ramya Sri
16BQ1A1213
s/w
Engineer,Tech
Mahindra

VVIT determined the day I joined that this would be my permanent home. First and foremost, Infrastructure stole my heart. It took me a little time to adjust, but once I started going to Friday clubs, everything became second nature to me.

The lectures at VVIT are entirely career-oriented, which aided me in achieving my goal of landing a position on Amazon. Technical events greatly aided me in honing my programming abilities. I would unquestionably recommend this institute to my friends and family as a remarkable institution.

The staff has a great deal of experience. They are incredibly accessible and willing to address my concerns! The placement ratio in the college is excellent, with over 90% of students being placed in MNCs with at least one offer.I got placed in the 3-2 semester. The typical package size is around 3.5L. My interview went quite well. I felt a little nervous, but my professor encourages all of us to be confident. It creates an environment in which you may flourish both academically and personally. It's all about seizing an opportunity.



Y. Avinash
Kumar
16BQ1A1260



Department Vision:

To produce IT professionals who can develop globally competitive and socially useful information technology enabled solutions and products that offer cost effective solutions, for organizations, in particular and society in general, through their innovative ideas, and to create a knowledge pool through research in this field.

Department Mission:

1. Producing information technology professionals for the Global IT industry.
2. Developing student centric and qualitative teaching-learning practices.
3. Establishing infrastructure that endows cutting edge technology requirements of the industry.
4. To extend service to the public, the state and the nation at large by building quality engineers.
5. To carve disciplined and socially, technologically better responsible citizens.
6. To make the students pursuing information technology the technological ambassadors of VVIT in whatever part of the world they find themselves in their future careers.

Program Educational Objectives (PEO'S):

PEO-1: Solid Foundation and Core Competence

To provide the graduates with concrete base in Information Technology, to pursue higher studies and to succeed in industry / technical profession with global competence by imparting acute technical skills like designing, modelling, analyzing and problem-solving on top of solid foundation in mathematical, scientific, computing and engineering fundamentals.

PEO-2:Employability & Research Spur

To train the graduates for a higher degree of employability in both public and private sector industries at national and international level by imparting ability to Re-learn and innovate in ever-changing global economic and technological environments and to contribute effectively in research and development.

PEO-3: Professional Skills and Societal Contribution

To inculcate the graduates to have basic interpersonal skills, effective communication skills to teamwork/ lead in multidisciplinary approach, under diverse professional environments by handling critical situations through lifelong learning with an ethical attitude (administrative acumen) and an ability to relate engineering issues to broader social context.

PEO-4: Real World Competency & Innovation

To enable students with good scientific and engineering breadth and technology skills so as to comprehend, analyze, design, and create novel products and solutions for the real-life problems to emerge as researchers, experts, educators & entrepreneurs.