



VIVA INSTITUTE OF TECHNOLOGY

VIRAR



# BOOTSTRAP

THE NEWSLETTER OF COMPUTER  
ENGINEERING DEPARTMENT

**DISCLAIMER.** All information provided in this newsletter is for educational & informative purposes only. 'Viva College of Engineering & Technology' is not responsible for any action or consequences, direct or indirect, arising from the use of this newsletter.

For internal circular only, NOT FOR SALE

**STAFF INCHARGE:** SIDDHESH DOIPHODE

**EDITOR:** CSI VIVA-TECH TEAM

### Vision

To develop competent citizens who will be valuable contributors in the field of technology and science.

### Mission

1. To create an environment this will stimulate research, creativity and innovation.
2. To provide students with comprehensive knowledge of the latest developments in Computer Engineering.

### Program Educational Objectives

1. To equip students with solid foundation for solving hardware and software problems as per the needs of the corporate sector.

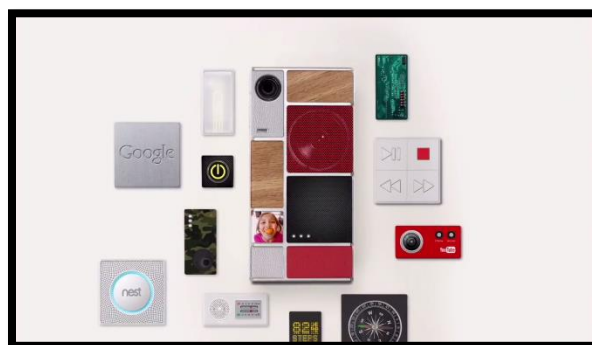
2. To develop the ability among the students to understand and interpret technical issues which is important for creating dynamic software.
3. To create an environment for inculcating leadership quality by nurturing raw talent.
4. To empower students and faculties for research and innovations.
5. To inculcate ethical, behavioral, organizational and social values.

“Each new day is a blank page in the diary of your life. The secret of success is in turning that diary into the best story you possibly can.”



**KEEP  
CALM  
AND  
THINK  
ON**

## ARA



Project Ara is the codename for an initiative that aims to develop an open hardware platform for creating highly modular smartphones. The platform will include a structural frame or endoskeleton that holds smartphone modules of the owner's choice,



BOOTSTRAP, ODD SEM, 2015-16 Computer Engineering Department

such as a display, camera or an extra battery. It would allow users to swap out malfunctioning modules or upgrade individual modules as innovations emerge, providing longer lifetime cycles for the handset, and potentially reducing electronic waste. Project Ara smart phone will begin pilot testing in Puerto Rico later 2015 with a target bill of materials cost of \$50 for a basic grey phone.

The project was originally headed by the Advanced Technologies and Projects team within Motorola Mobility while it was a subsidiary of Google. Although Google has since divested Motorola to Lenovo, it retained the Advanced Technologies and Projects group—which has since worked under the direction of the Android division. Google says the device is designed to be utilized by "6 billion people"; including 1 billion current smart phone users, 5 billion feature phone users, and 1 billion future user not currently connected. Google intends to sell a starter kit where the bill of materials is US\$50 and includes a frame, display, battery, low-end CPU and Wi-Fi.

**-Sumit Mangela(TE)**

## SOLI



your hands and fingers. Shaped as a chip the size of a quarter, Soli can be embedded in most wearable's and electronic devices. The initial applications for the radar system are smart phones and smart watches.

Project Soli was revealed during Google I/O 2015 on May 29, 2015.

Soli is a 60GHz RF transmitter that uses board beam radar to measure everything from spectrogram to Doppler image to IQ. Using these information, the tiny circuit board is able to determine the hand size, motion and velocity. It then uses machine-learning to translate these movements to pre-programmed commands.

Soli functions within 60GHz radar spectrum at up to 3000 to 10,000 fps.

The software API for Soli will be released late 2015.

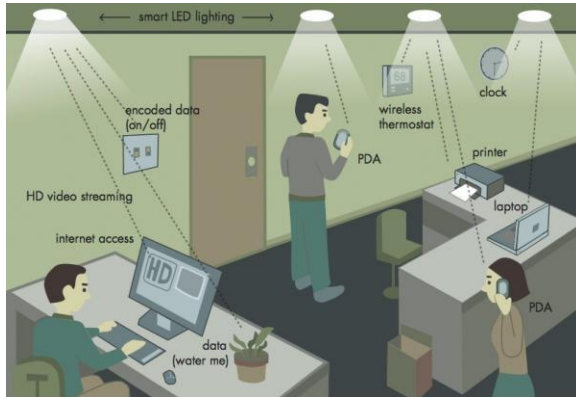
Features:

- Translates hand gestures and finger movements into commands for your smart devices.
- The sensor can track sub-millimeter motions at high speed and accuracy.
- Small gestures such as turning of a nub or sliding of a page work fine.
- Works through materials such as fabric.

**-Dattaram Naik(TE)**



## LI-FI(LIGHT-FIDELITY)

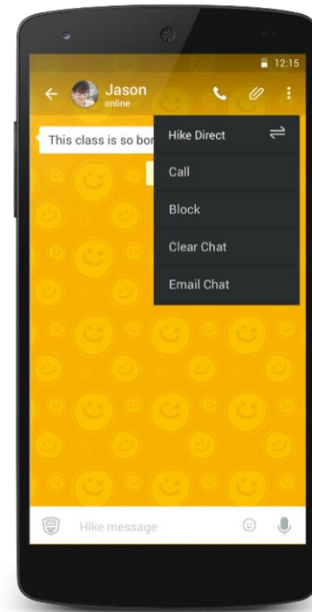


Li-Fi, as coined by Prof. Harald Haas during his TED Global talk, is bidirectional, high speed and fully networked wireless communications similar to Wi-Fi. Li-Fi is a subset of optical wireless communications (OWC) and can be a complement to RF communication (Wi-Fi or Cellular network), or a replacement in contexts of data broadcasting.

It is wireless and uses visible light communication or infra-red and near ultraviolet (instead of radio frequency waves) spectrum, part of Optical wireless communications technology, which carries much more information, and has been proposed as a solution to the RF-bandwidth limitations. A complete solution includes an industry led standardization process.

**-Nitin Daddikar(TE)**

## HIKE DIRECT



According to the company, hike direct is built ground up with a new generation of network solutions. It adds, that hike direct uses Wi-Fi Direct technology systems that help establish peer to peer network connection between two phones. To use hike direct, you need to start a conversation with a friend and choose Hike Direct from the 3 dot menu on top right of the screen. Hike automatically pairs up with the other phone and lets you chat and share files with your friends without the internet.

Users can get this feature by upgrading to the latest version of hike, version 4.0.6 and above, which is available free on the Google Play Store nowadays. Hike Direct on iOS, Windows to follow next year.

The company also announced that it crossed 70 million users last month with 20 billion



BOOTSTRAP, ODD SEM, 2015-16 Computer Engineering Department

messages being exchanged per month making it by far the 2nd largest messaging app in the country. An average user on hike spends over 140 minutes per week on the application.

**-CSI\_VIVA-TECH(TEAM)**

## BOOTSTRAP



Bootstrap is a sleek, intuitive, and powerful front-end framework for faster and easier web development. Bootstrap comes equipped with HTML, CSS, and JavaScript for various web and user interface components.

Mark Otto and Jacob Thornton at Twitter developed bootstrap, originally named "Twitter Blueprint" as a framework to encourage consistency across internal tools. Bootstrap is a free and open-source collection of tools for creating websites and web applications. It contains HTML and CSS based design templates for typography, forms, buttons, navigation, and other interface components, as well as optional JavaScript extensions. It makes development of dynamic websites and web applications easy.

Bootstrap is a front-end framework, An interface for the user, unlike the server side code, which resides on the back end.

Bootstrap is compatible with the latest versions of the Google Chrome, Firefox, Internet Explorer, Opera, and Safari browsers.

Bootstrap gives you ability to create responsive layout with much less efforts. Starting with version 2.0 it supports responsive web design. In version 3.0, Bootstrap adopted a mobile first design philosophy. The version 4.0 alpha release added Sass and Flex box support.

The biggest advantage of using Bootstrap is that it comes with free set of tools for creating flexible and responsive web layouts as well as common interface components. Additionally, using the Bootstrap data APIs you can create advanced interface components like Scrollspy and Type aheads without writing a single line of JavaScript.

**-Purva Mestry (B.E)**

*"All of us do not have equal talent.  
But, all of us have an equal  
opportunity to develop our talents."  
- A.P.J Abdul Kalam*

Computer Engineering Department  
salutes

**|| Dr. Avul PakirJainulabdeen ||**



**TEST YOUR APTITUDE:**

CSI\_VIVA-TECH & with kind support of Computer Department conducted following list of events successfully:

<b>1.</b>	15, 31, 63, 127, 255, (....)	<input type="radio"/> A. 513	<input type="radio"/> B. 511
		<input type="radio"/> C. 517	<input type="radio"/> D. 523
<b>2.</b>	The value of $\frac{0.1 \times 0.1 \times 0.1 + 0.02 \times 0.02 \times 0.02}{0.2 \times 0.2 \times 0.2 + 0.04 \times 0.04 \times 0.04}$ is:	<input type="radio"/> A. 0.0125	<input type="radio"/> B. 0.125
		<input type="radio"/> C. 0.25	<input type="radio"/> D. 0.5
<b>3.</b>	What will be the day of the week 15 <sup>th</sup> August, 2010?	<input type="radio"/> A. Sunday	<input type="radio"/> B. Monday
		<input type="radio"/> C. Tuesday	<input type="radio"/> D. Friday
<b>4.</b>	The sum of two number is 25 and their difference is 13. Find their product.	<input type="radio"/> A. 104	<input type="radio"/> B. 114
		<input type="radio"/> C. 315	<input type="radio"/> D. 325

Month	Events
January, 2015	1) Android Application Development seminar Lecture specially conducted for TE computer students. 2) Entrepreneurship seminar conducted for BE computers.
February, 2015	Present 5 <sup>th</sup> CSI_VIVA-TECH Newsletter.
July, 2015	Guru virtues seminar on project management.
September, 2015	TECHCHASE – 15Events under CSI_VIVA-TECH were : 1) Laser Tag 2)Enable Me 3) Mud Race and many more ... The CSI_VIVA-TECH successfully organized the second Inter collegiate Technical Festival Techchase-2015 on 3 <sup>rd</sup> & 4 <sup>th</sup> of September, 2015.
September, 2015	Wordpress Seminar by Vinit Kubal ,Pritesh Gentyala, Sonal Mehta.
October, 2015	ADVANCE JAVA workshop





BOOTSTRAP, ODD SEM, 2015-16 Computer Engineering Department

## RECENT ACHIEVEMENTS OF COMPUTER ENGINEERING STUDENTS

### TECHNICAL PAPERS PUBLISHED IN INTERNATIONAL JOURNAL OF COMPUTER APPLICATION (IJCA)-15

1. **Sagar Narkar, Rutuja Jamgekar, Supriya Kore & Siddhesh Doiphode**– ‘DTMF Based Hybrid Robot For Air And Land’ guided by Ms.Ashwini Save
2. **Amol Khedekar, Pooja More, Aakash Ilag & Tatwadarshi P.N.** – ‘Steganography In Audio Filles Using Modified F5 Algorithm’ guided by Ms.Ashwini Save
3. **Prabodh Jadhav, Sayali Waje, Prasad Raut & Sunita Naik**- ‘Image Restoration Using Digital In painting And Super resolution’ guided by Mrs. Sunita Naik
4. **Subramaniam Seshadri, Ashwin Lohidasan, Rohini Lokhande & Ashwini Save** – ‘Opinion Mining For Hinglish Words Using Supervised Learning’ guided by Ms.Ashwini Save.

### TECHNICAL PAPERS PUBLISHED IN IJERT-15

1. **Harshit Damani, Ashwini Bhoir, Akshay Abhyankar & Ashwini Save**- ‘Smart city reflecting municipal co-operation for human welfare’ guided by Ms. Ashwini Save.

### TECHNICAL PAPER PRESENTATION

**Topic :-** Linux Voice Synthesizer

**Presented By :-**Harshal Pandit

**Shailendra Nipane**

**Suraj Jadhav**

**Hiren Parmar**

**Achivement :-** 2<sup>nd</sup> Prize

**Place :-**Universal College of Engineering, Vasai

### TORCH - SKULL FLASHLIGHT (ANDROID APP)



**Developer: -** Nitin B.Daddikar (TE),  
Tejasvi C. Bargode (TE),  
Himanshu N. Wadekar (TE)

**Link: -**

[https://play.google.com/store/apps/details?id=com.instagroup.in.torch\\_skullflashlight](https://play.google.com/store/apps/details?id=com.instagroup.in.torch_skullflashlight)



**Harshit Damani (Left), Ashwini Bhoir (Middle), Akshay Abhyankar (Right)** With Certificate showing their **3<sup>rd</sup> place** for **Smart City app** in Project Exhibition at Vidyalankar college of engineering.

## TOPPERS OF LAST SEMESTER

### B.E. Computer:

**1<sup>st</sup> Rank** –Priyesh Naik With 80.23%

**2<sup>nd</sup> Rank** –Sagar Narkar With 80%

### T.E. Computer:

**1st Rank** – Palak Shah With 9.67 SGPI

**2nd Rank** – Sonal Mehta With 9.5 SGPI

– Inderjeet Sav With 9.5 SGPI

### S.E. Computer:

**1<sup>st</sup> Rank** – Sumit Mangela With 9.14 SGPI

**2<sup>nd</sup> Rank** –Shrividhya Iyer With 8.89 SGPI

*For more info* <http://www.viva-technology.org>