

# ECE QUEST

(A Bi-annual Technical Magazine)

Volume 2 Issue 2

April 2017

**Chief Editor:**

D. Srikanth, Associate Professor, ECE

**Editors:**

T sireesha, Assistant Professor, ECE

DhulipudiJeevan Raj (14KT5A0411)

D Naga Neelima(14KT1A0424)

D. Madhavarao (15KT1A0428)

# PSCMR

**College of Engineering and Technology**

Sponsored by : SKPVV Hindu High School Committee, Estd : 1906

Approved by : AICTE, NEW DELHI and Affiliated to JNTU, Kakinada



# Contents:

- About the Department, Vision, Mission, PSOs, PEOs
- Do it yourself
- Scientist of the year
- Important Websites
- Crossword
- Events

# About the Department

The Department of **Electronics and Communications Engineering** envisions the E.C.E graduate as a competent and ethical professional in the areas of electronics, communications, and digital signal processing. The Department of Electronics and Communication Engineering is established in **2008**. It offers B.Tech programme with a student intake of **120**.

## Vision:

To be a leading center for education and research in electronics and communication engineering, making the students adaptable to contemporary technologies with sound knowledge and socio-ethical values in an integrated learning environment.

## Mission:

- **M1:** To produce knowledgeable and technologically competent engineers for providing services to the society.
- **M2:** To have a collaboration with leading academic, industrial and research organizations for promoting research activities among faculty and students.
- **M3:** To create a unified learning environment for sustained growth in electronics and communication engineering and related areas.



# PSO'S

- **PSO<sub>1</sub>:** The ECE Graduates will be equipped with knowledge of complete design flow from specification to silicon in areas of both digital and analog VLSI Design and will be able to work in IC design companies.
- **PSO<sub>2</sub>:** The ECE Graduates will be trained with microprocessor and microcontroller based system design skills and can work as design and verification engineers in the area of embedded systems design.
- **PSO<sub>3</sub>:** The ECE Graduates will be able to apply engineering knowledge for design and implementation of projects pertaining to signal processing and communications.
- **PSO<sub>4</sub>:** The ECE Graduates will be incorporated with necessary soft skills, Aptitude and technical skills to work in it and public sector.

# PEO'S

- **PEO<sub>1</sub>: Engineering Foundation**

To produce graduates with firm foundation in electronics and communication engineering.

- **PEO<sub>2</sub>: Core Competence**

To motivate graduates to Analyze, Design, Develop, Optimize and implement electronic systems with competent spirit.

- **PEO<sub>3</sub>: Breadth Knowledge**

To enable graduates with sufficient breadth in electronics and its related fields to solve general engineering problems in an eco-friendly environment.

- **PEO<sub>4</sub>: Soft Skills**

To make graduates with a professional outlook who can communicate effectively and interact responsibly with colleagues, Clients, Employers and society.

- **PEO<sub>5</sub>: Knowledge Enhancement**

To prepare graduates who pursue lifelong learning and professional development including higher education.

# Do it yourself

## Arduino-based Front Office Visitor Alarm

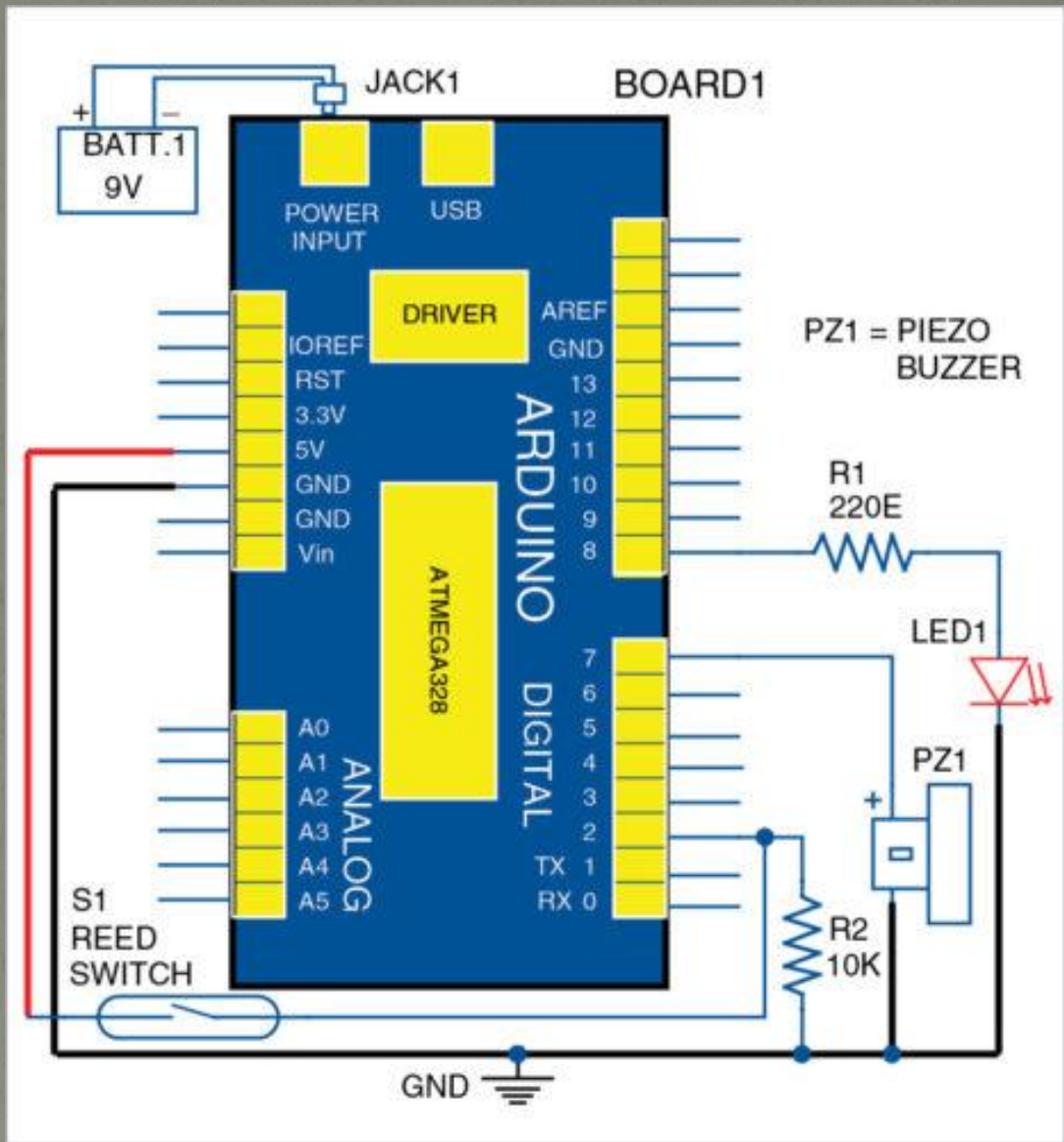
- This Arduino based visitor alarm is useful for offices, clinics and shops. It alerts you to the entry of a visitor by producing a beep sound every time the door is opened. The alarm automatically switches off after a few seconds.

### Circuit and working

- Circuit diagram of the Arduino based visitor alarm is shown below. It is built around an Arduino Uno board (Board<sub>1</sub>), a reed switch (S<sub>1</sub>) and a piezo buzzer (PZ<sub>1</sub>).



# CONTD..



<https://electronicsforu.com/electronics-projects/arduino-based-visitor-alarm>

# Scientist of the year

## Srinivasa Ramanujan

Indian mathematician

- Srinivasa Ramanujan (22 December 1887 – 26 April 1920) was an Indian mathematician who lived during the British Rule in India. Though he had almost no formal training in pure mathematics, he made substantial contributions to mathematical analysis, number theory, infinite series, and continued fractions, including solutions to mathematical problems considered to be unsolvable.



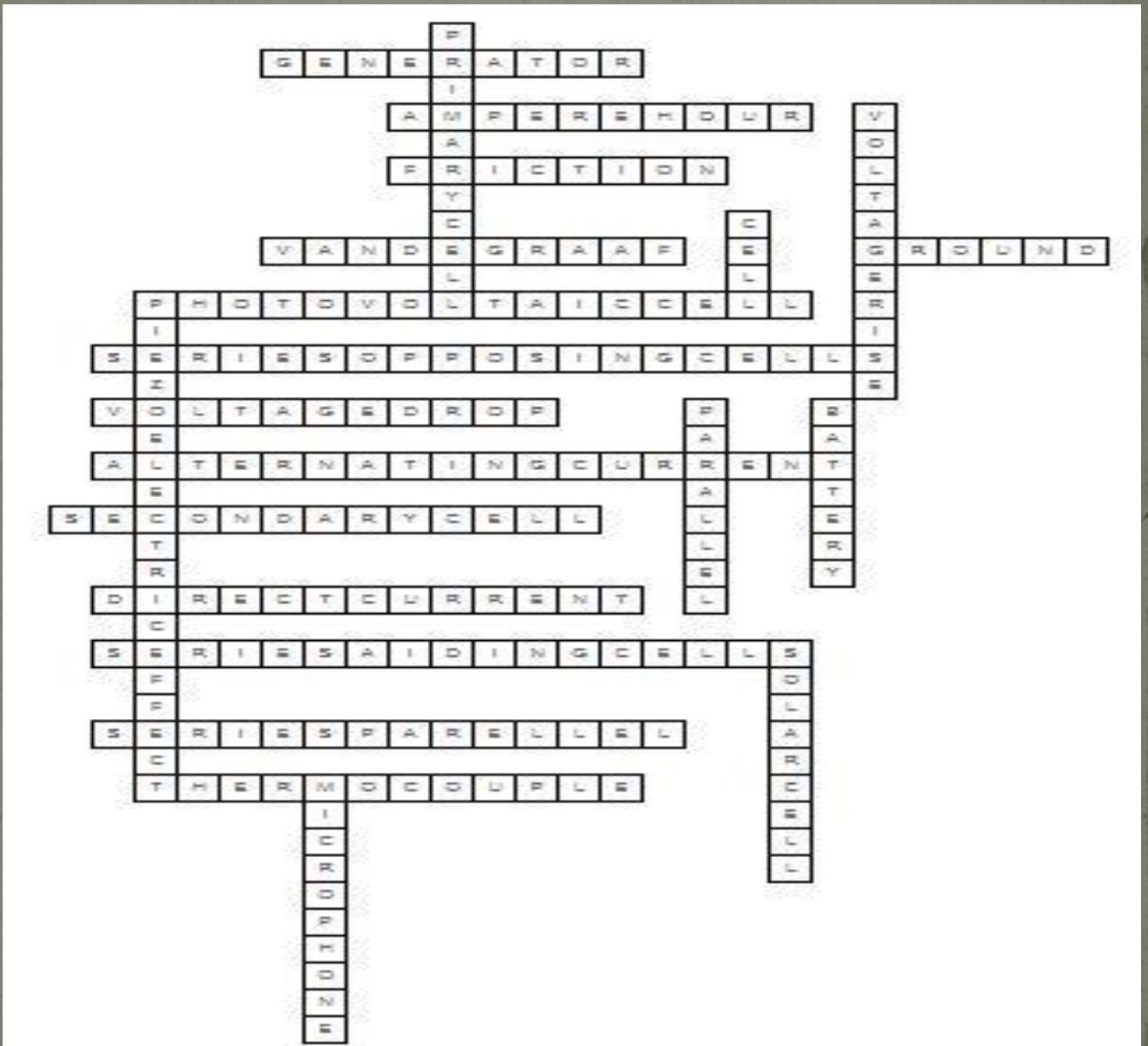


# Important Websites

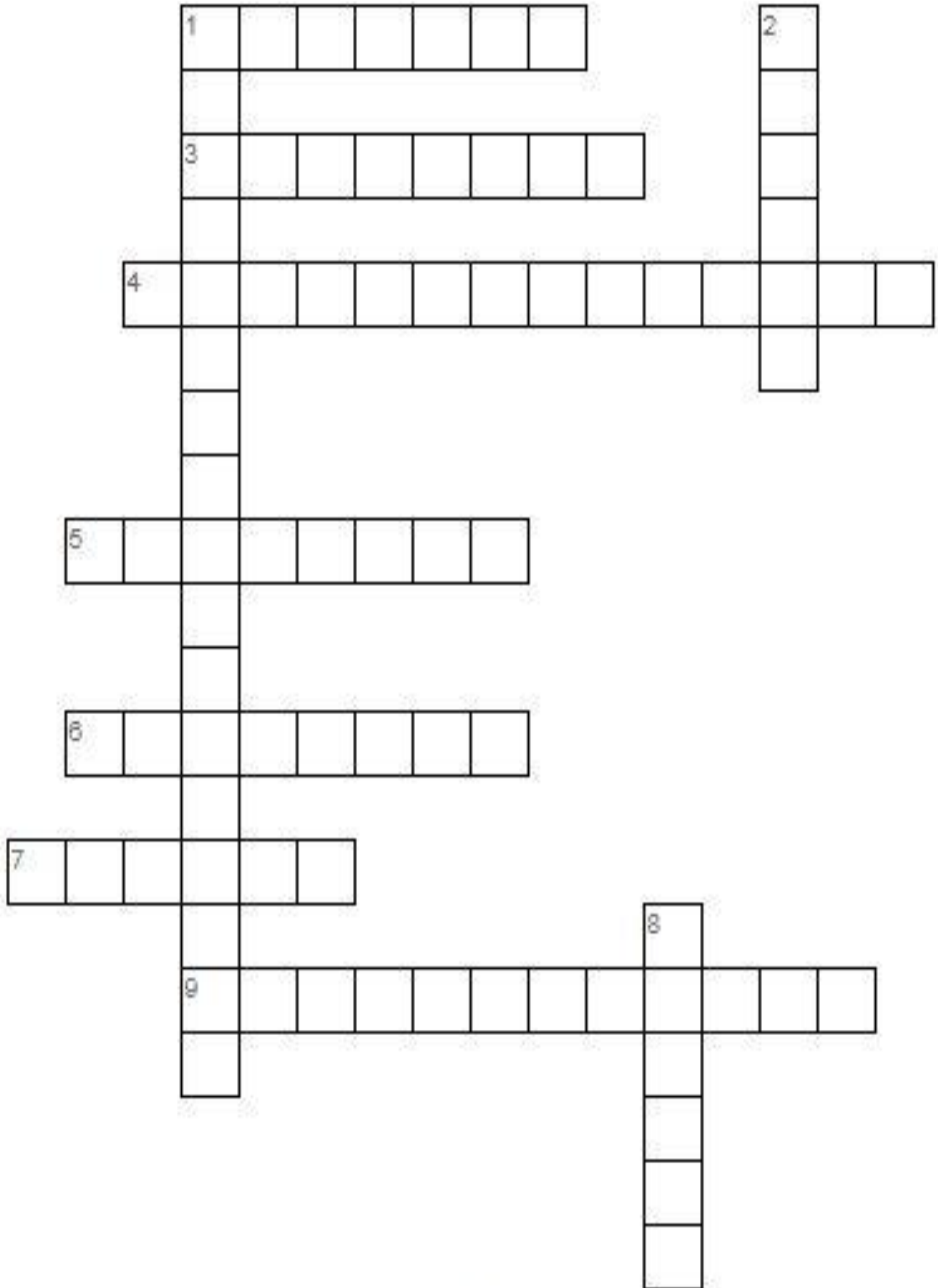
- India Bix - **indiabix.com** - You will learn and can practice Aptitude questions and answers with explanation for interview, competitive examination and entrance test.
- India Results - **indiaresults.com** - It's a educational portal for results of various boards, universities, competitive examination, also has a career section for students.
- Merit Nation - **meritnation.com** - Meritnation provides NCERT solutions, CBSE online study material, ICSE online study material, CBSE revision notes, CBSE model test papers, CBSE guess papers and much more.
- India Study Channel - **indiastudychannel.com** - offers comprehensive information about the schools, colleges and universities in India along with an opportunity for students to earn revenue through various sections of this site by contributing content.

# Crossword

- Solution to the previous issue:



Contd..





# Contd..

## Across

- 1 (also known as a black hat hacker) is an individual with extensive computer knowledge whose purpose is to breach or bypass internet security or gain access to software without paying royalties.
- 3 a feature or defect of a computer system that allows surreptitious unauthorized access to data.
- 4 is the environmentally responsible and eco-friendly use of computers and their resources.
- 5 forgery of an email header so that the message appears to have originated from someone or somewhere other than the actual source.
- 6 form of fraud in which the attacker tries to learn information such as login credentials or account information by masquerading as a reputable entity or person in email, IM or other communication channels.
- 7 a network of private computers infected with malicious software and controlled as a group without the owners' knowledge, e.g., to send spam messages.
- 9 a person who uses existing computer scripts or code to hack into computers, lacking the expertise to write their own.

## Down

- 1 is a crime involving an attack or threat of attack coupled with a demand for money to avert or stop the attack.
- 2 computer connected to the Internet that has been compromised by a hacker, computer virus or trojan horse program and can be used to perform malicious tasks of one sort or another under remote direction.
- 8 software that automatically displays or downloads advertising material (often unwanted) when a user is online.

# Events



Advanced telecom Technologies conducted during 2016-17

Industry visit at BSNL as part in the workshop "Advanced telecom Technologies" conducted during 2016-17



Arduino and its applications conducted during 2016-17