

TITLE	Microcontroller based collision detection & warning system, Compact power bank
NAME OF THE STUDENT(S)	K. Gowri
NAME OF THE COLLEGE	Vivekanandha College for women

TITLE	Electrical energy sources in nature
NAME OF THE STUDENT(S)	C.Elamathi
NAME OF THE COLLEGE	Vivekanandha college for women

ABSTRACT

SOLAR ENERGY

Electricity is becoming expensive with each passing day and more people are getting interested in using solar energy to meet their electricity. Solar panel refers to a panel designed to absorb the sun's rays as a source of energy for generating electricity or heating.

WIND ENERGY

Wind turbines are used to generate electricity from the kinetic power of wind. Wind turbines can be used to generate large amount of electricity in wind farms both onshore and offshore.

WATER FORCE

Mix both 20g salt with 400ml of warm water in 3 cups. Using the alligator clip leads clip the aluminium foil to one side of a cup. Clip the copper plate strands of the broom handle part of the copper to the other side of the cup. A salt water cell will make LED glow brighter.

MATERIALS

- Solar panel
- Battery
- Copper and aluminum plates
- Salt water.

USES

To create a electricity power.

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NAME OF THE FACULTY/DESI./DEPT/COLLEGE:P.SELVI/AP/CS/VCW

ABSTRACT (compact power bank)

The main concept of compact power bank is to reduce the cost. It is very small in size. It is very useful in emergency situation

Compact - Small

Compact power bank consist only few components

MATERIALS

Resister
Capacitor
Qv battery
Diode

USES

It is used to charge the mobile.

Abstract (microcontroller based collision detection & warning system)

The system envisioned is automatic collision detection and warning system relying on a Ultra sonic proximity sensor. The vehicle to be safeguarded is to be fitted with the system sturdily ensuring good mechanical coupling with the entire chassis. In the case of an anticipated accident, the system detects it using the fact that the vehicle would be suddenly decelerated in such a condition. An accelerometer sensor continuously monitors the acceleration of the vehicle and will detect decelerations greater than threshold value and send the data to the microcontroller.

The controller compares this with the threshold set value and immediately triggers the function, in this case led light. This can be enhanced by the controller that can transmit the GPS coordinates of the vehicle which it continuously obtains from the GPS module. This system will also highly aid the search and rescue of vehicles that have met with an accident.

Uses

It is used to prevent accident.

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NAME OF THE FACULTY/DESI./DEPT/COLLEGE:P.SELVI/AP/CS/VCW



TITLE	CLAP SWITCH
NAME OF THE STUDENTS	B.KIRUTHIKA,S.ISHA SHERIF,S.SAVITHA
NAME OF THE COLLEGE	VIVEKANANDHA COLLEGE FOR WOMEN

ABSTRACT :

CLAP SWITCH

Flip flop circuit is made by using two Transistor, in our circuit Q2&Q3. In a flip-flop circuit, at a time only one transistor conduct and other cutoff and when it gets a trigger pulse from outside source then first transistor is cutoff and 2nd transistor conducts, thus output of transistor is either logic-0 or logic-1 and it remains in one state 0 or 1 until it gets trigger pulse from outer source. The pulse of clap, which is a trigger for flip-flop, makes changes to the output state that is complementary Output of flip-flop, which is in the low current form, is unable to drive relay so we have used a current amplifier circuit by using Q4 that is a common emitter circuit. Output of Q4 is connected to a Relay (Electromagnetic switch) which works like a mechanical switch and it becomes easy for connecting other electrical appliance.

The relay contact is connected to the power line and hence turns on/off any electrical appliance connected all the way through relay.

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NAME OF THE FACULTY/DESI./DEPT/COLLEGE: G.JOTHIMANI/AP/CS/VCW

Format for abstract

TITLE	WIFI HACKING + GAME
NAME OF THE STUDENT(S)	G.Indhu, R.Narmadha, M.Malathipriya
NAME OF THE COLLEGE	Vivekanandha College for Women
ABSTRACT	
<p>Hacking wi-fi device is not always easy,you have to be careful of so many steps.Otherwise, you might even caught.For easy and secure hacking one should use the command Prompt.</p>	
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NAME OF THE FACULTY/DESI./DEPT/COLLEGE:M.BUVANESWARI/AP/CS/VCW	

TITLE	Automatic fire safety machine
NAME OF THE STUDENT(S)	A.Roneka, S.Kiruthika. N.Gokulapriya
NAME OF THE COLLEGE	Vivekanandha collage for women

ABSTRACT

The project is a prototype of an automatic fire alarm and extinguishing system. it works on principle of detection of fire by sensing rise in temperature using a thermostat . as soon as the fire is detected the circuit becomes live there giving an audio alarm simultaneously. initiate automatic control& suppression systems & to sound alarm. Detect fire in the areas. Audio alarm simultaneously.

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NAME OF THE FACULTY/DESI./DEPT/COLLEGE:P.KALADEVI/AP/CS/VCW



TITLE	Automatic Street Light
NAME OF THE STUDENT(S)	M.BANUPRIYA M.NIVETHA M.VINOTHINI L.SUJITHA
NAME OF THE COLLEGE	VIVEKANANDHA COLLEGE FOR WOMEN
<p>ABSTRACT</p> <p>Needs no manual operation for switching ON and OFF. When there is a need of light it automatically switches ON. When darkness rises to a certain level then sensor circuit gets activated and switches ON and when there is other source of light i.e. daytime, the street light gets OFF. The sensitiveness of the street light can also be adjusted. In our project we have used four L.E.D as a symbol of street lamp, but for high power switching one can connect Relay (electromagnetic switch) at the output of pin 3 of I.C 555 that will make easy to turn ON/OFF any electrical appliances that are connected through relay.</p> <p>GUIDED BY NAME OF THE FACULTY/DESI./DEPT/COLLEGE: L.NISHA/AP/CS/VCW</p>	

