

Yashwantrao Chavan College of Science, Karad

Department of Electronics

Student Seminar - B.Sc.II

Academic Year - 2023-24



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Department of Electronics
Yashwantrao Chavan College of Science,
Karad

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Principal
Yashwantrao Chavan College of Science, Karad



YASHWANTRAO CHAVAN COLLEGE OF SCIENCE KARAD
ACTIVITY REPORT

Name of the Department: Electronics		Academic Year – 2023-24
		Date :- 26/3/2024
Name of the activity	B.Sc. II Electronics Students Seminar	
Purpose of Program	To impose presentation skill in a student To impose stage daring in a student	
No. of Students Participated	11	
No. of Teachers Participated	04	
Program outcomes	1) Personality Development: Stage daring, Presentation Skill, communication Skill, Explanation ability, Courage etc. 2) Developing Leadership Skill. 3) A well Trained Students.	
Program Photo		

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Teacher In charge

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Signature

Head of the Department

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Department of Electronics
Yashwantrao Chavan College of Science,
Karad

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Principal

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Yashwantrao Chavan College of Science, Karad

Department of Electronics

Student Seminar 2023-24

Class: -B.Sc.II

Notice



Date : 20/03/2024

All students of the B.Sc. II class are informed that, a student seminar is arranged on 26/03/2024 at 11:00 Am in the electronics department. It is compulsory for all students. All should note and follow. p

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HEAD

Department of Electronics
Yashwantrao Chavan College of Science,
Karad

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Principal

Yashwantrao Chavan College of Science, Karad



Yashwantrao Chavan College Of Science Karad

Department Of Electronics

Name of the activity : Students Seminar B.Sc.II

Year :- 2023-24

Date : 14/03/2024

Sr.No	Student Name	Class	Signature
1	Kashid Dhanashri Gurunath	B.Sc.II	
2	Pawar Anjali Ganpat	B.Sc.II	
3	Mulik Akshay Eknath	B.Sc.II	
4	Nande Viswajeet Sampat	B.Sc.II	
5	Nikaj Om Vijay	B.Sc.II	
6	Ghadage Shivaji Satish	B.Sc.II	
7	Yadav Suraj Arjun	B.Sc.II	
8	Pisal Siddesh Dipak	B.Sc.II	
9	Ram Prashankumar Sunil	B.Sc.II	
10	Thorat Rohan Dadaso	B.Sc.II	
11	Reur Sufin Mohammad	B.Sc.II	

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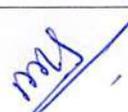
YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD

DEPARTMENT OF ELECTRONICS

Seminar Report Title B.Sc.II

Academic Year 2023-24

Sr.No.	Name of student	Seminar Title
1.	Kashid Dhanashree Gurunath	Zigbee
2.	Pawar Anjali Ganpat	Robotics
3.	Nande Vishwajeet Sampat	5G Technology
4.	Nikalje Om Vijay	Smart Phone
5.	Ghadage Shivaji Satish	Wi-Fi
6.	Mulik Akshay Eknath	Biomedical Instrument
7.	Pisal Siddesh Deepak	Nano- Sensor
8.	Ram Prashantkumar Sunil	Sensor Technology
9.	Thorat Rohan Dadaso	PLC
10.	Reur Sufian Mohammad	EEG
11	Yadav Suraj Arun	Sensor Technology


Teacher Incharge


HEAD
Department of **HOD** Electronics
Yashwantrao Chavan College of Science,
Karad


Principal
Yashwantrao Chavan College of Science, Karad



YASHWANTRAO CHAVAN COLLEGE OF SCIENCE KARAD

"DEPARTEMENT OF ELECTRONICS"

NAME :- RAM PRASHANTKUMAR
SUNIL.

ROLL NO :- 1076

Principal
Yashwantrao Chavan College of Science, Karad

SEMINAR NO - SENSOR TECHNOLOGY

Apoorva
Teacher
in charge

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28/3/24
Examiner

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HEAD OF
Department of Electronics
Yashwantrao Chavan College of Science,
Karad

SENSOR TECHNOLOGY.

Introduction.

Working principle.

Programming language.

Application's

Advantages

Disadvantage's

Future Aspects.

Conclusion.

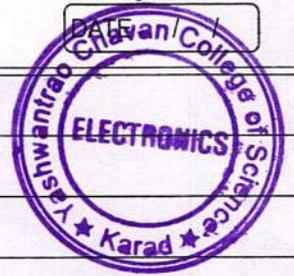
Reference.



INTRODUCTION

A sensor (also called detectors) is a device that measures a measurable attribute and converts it into a signal which can be read by an observer or by an observer or by an instrument.

The need for new types of sensor is more critical than ever. This is due to the emergence of increasingly complex technologies, health and security concerns of increasing world population & the emergence of terrorist activities. Among other factors sensor are the most important component in any system & engineers in any field need to understand the fundamentals of how these components work how to select them properly & how to integrate them into a overall system depending at their application.



WORKING PRINCIPLE.

The working principle of resistive sensors is based on the change in electrical resistance that occurs when the sensor's material is subjected to change in a physical quantity. For example, in a temperature sensitive, the resistance changes with temperature.

- Thermistors - These sensors change their resistance with temperature and are commonly used in temperature sensing & control applications.
- Photoresistance - These sensors change their resistance with their intensity & are used in applications such as light detection & ambient light sensing.

PROGRAMMING LANGUAGE

Choosing a programming language for automotive manufacturing sensors is an important first step. There are many languages to choose from including C, C++, Python, Java, Arduino.





APPLICATIONS

- Measure the portion of the UV spectrum which sunburn human skin.
- pharmacy.
- Automobiles.
- Robotics.
- printing industry For solvent handling & dyeing process.
- Chemical industry For the production storage and transportation of chemicals
- Fluid level sensors.
- Commercial - medical, vending fitness & gaming.



ADVANTAGES.

Has no effect on the medium it measure.

It precisely accurate.

Responds intantly

Has an easily conditioned output.

Accuracy.

No self-heat.

self-powered.

Overall cost is low

Ease of use.

DISADVANTAGES

Non-linearity

Moisture Failures

limited applications.

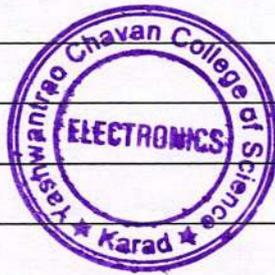


FUTURE ASPECTS

In the future maintenance will rely on sensor instead of being carried out according to the need based timetable. safety will also predicted. Autonomous sensor technology will becomes possible. The recent advance of sensor technological have been powered by high speed and low cost electronic circuit's novel signal processing method and innovative advance in manufacturing technologies.

CONCLUSION

Owing to its wide range of application sensor technology is fast gaining momentum in modern day technological world. Its application to vary from common home application to highly sophisticated electrical, electron equipment.





Yashwantrao Chavan
College Of Science
Karad

Name :- Sufian Mohammad Reur

Roll No :- 1077 B.Sc. II

Department of
Electronics

Seminar no :-

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Teacher
incharge

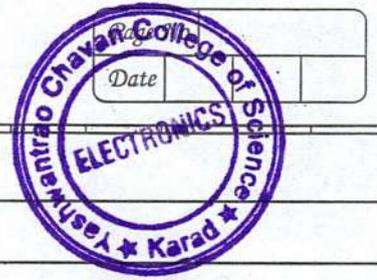
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28/03/24

Examiner

Principal

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Head of
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EEG

- ★ Introduction
- ★ Working Principle
- ★ Programming Language
- ★ Applications
- ★ Advantages
- ★ Disadvantages
- ★ Future Aspects
- ★ Conclusion
- ★ Reference

Introduction

The full form of EEG is Electroencephalogram. It is a procedure that is carried out to evaluate the brain's electrical behaviour. Brain cells, known as neurons, interact through electrical impulses with one another. EEG includes a brain wave metric, which is how the brain function through time it detects brain wave metric, which is how the brain patterns of the brain's electrical impulses and records them.

- Tiny metal discs with a fine wire that are labelled as electrodes arrive with the system that users perform the test.
- The electrodes are mounted on the scalp of from where it passes signals to the computer to track the result.
- It produces a standard or identifiable pattern for familiar brain activity, but the pattern can be altered or unrecognizable for abnormal brain activity.



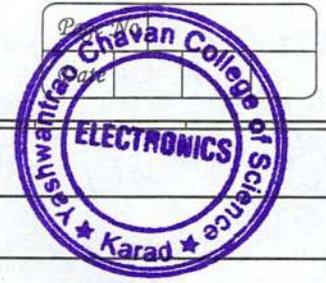
Working Principle

- The EEG procedure is safe and pain free.
- The electrodes mounted on the scalp collect electrical activity within your brain from the brain cells known as neurons and forward it to a system where they are seen as a series of lines registered or shown on a computer monitor (running paper).
- The A technician would take the electrodes off after getting results.
- Your brain wave sequence recordings can be studied by a doctor specializing in the brain, like a neurologist.



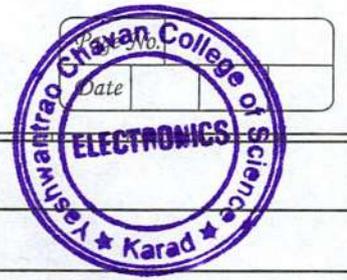
Programming Language

In data science, a few languages are particularly widely used. The internet is rife with clickbait-y pages such as "Top languages every data scientist should know in 202x", while these may rely on questionable methodologies, a general survey of such pages reveals a fairly consistent set of languages, including Python, R, MATLAB, C, Java, SAS, Julia, and scala. Within the field of neuroscience, however, the most common languages you're likely to come across are Python, R, and MATLAB. Indeed, a survey I conducted of faculty in the Department of Psychology & Neuroscience at Dalhousie University (April, 2020, $n=11$) supports this claim, as shown in the plot below (Note that SPSS is still widely used in statistics, but apparently far less in industrial data science applications).



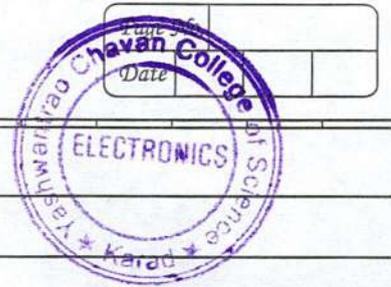
Application

- Epilepsy
- Brain death testing
- Various brain cancer sleep disorders (insomnia), narcolepsy, (uncontrollable sleep).
- Sleep paralysis (inability to move during full consciousness)
- Chronic hypersomnia (excessive sleep or sleepiness)



Advantages

- Non - invasive & harmless
- Lower costs
- Portable
- High temporal resolution



Disadvantages

- High noise ratio
- Not very exact measuring
- skull weakness the electrical activity
- Low spatial resolution.

Yashwantrao Chavan College of Science, Karad

Department of Electronics

Feedback form

Name of the Activity – Industrial Visit B.Sc. II

Name of the Student: Miluk Akshay Eknath

Class: BSC # Roll No. 1220

		Excellent (5)	Very Good (4)	Good (3)	Satisfactory (2)	Poor (1)
1	Industrial Visit was Held Organized	✓				
2	The location Selected was Appropriate to meet Started object.	✓				
3	Industrial expert was responsive to the Students dump Visit.		✓			
4	Higher recommend the Field visit to be continued .		✓			
5	Over all Departmental co-operation & management .	✓				

Date: 14-3-24

Sign. Miluk



Yashwantrao Chavan College of Science, Karad

Department of Electronics

Feedback form

Name of the Activity – Industrial Visit B.Sc. II

Name of the Student: Yadav Suraj Arun

Class: BSC-II Roll No. 1079

		Excellent (5)	Very Good (4)	Good (3)	Satisfactory (2)	Poor (1)
1	Industrial Visit was Held Organized	✓				
2	The location Selected was Appropriate to meet Started object.	✓				
3	Industrial expert was responsive to the Students dump Visit.	✓				
4	Higher recommend the Field visit to be continued .	✓				
5	Over all Departmental co-operation & management .	✓				

Date 14/03/24

Sign. S. Yadav



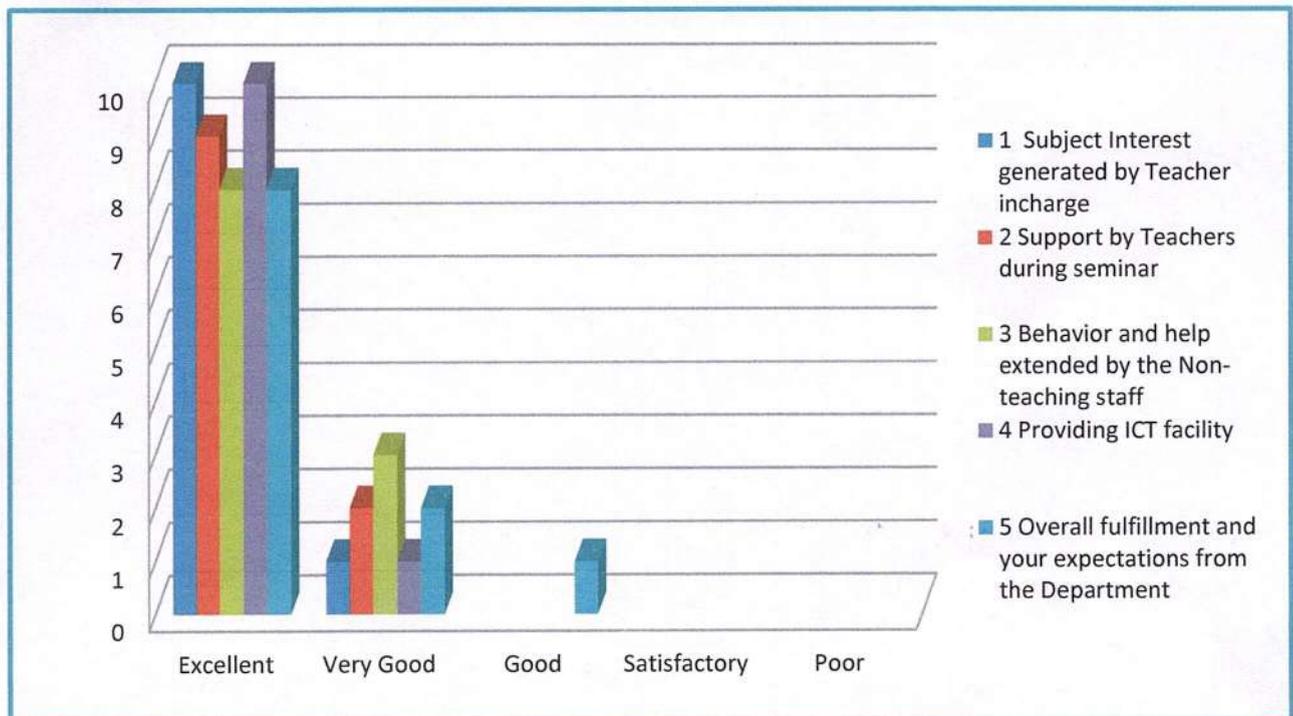
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Department of Electronics

Name of the Activity :- Student Seminar - B.Sc.II

Feedback Analysis - 2023-24

		Excellent	Very Good	Good	Satisfactory	Poor
1	Subject Interest generated by Teacher incharge	10	1			
2	Support by Teachers during seminar	9	2			
3	Behavior and help extended by the Non-teaching staff	8	3			
4	Providing ICT facility	10	1			
5	Overall fulfillment and your expectations from the Department	8	2	1		



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