



# Yeshwantrao Chavan College of Engineering, Nagpur

(An Autonomous Institute of Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)



## Department of Electronics Engineering

### Smart Safety Footwear using GPS with Mosquito Current Net

Session: 2023-2024

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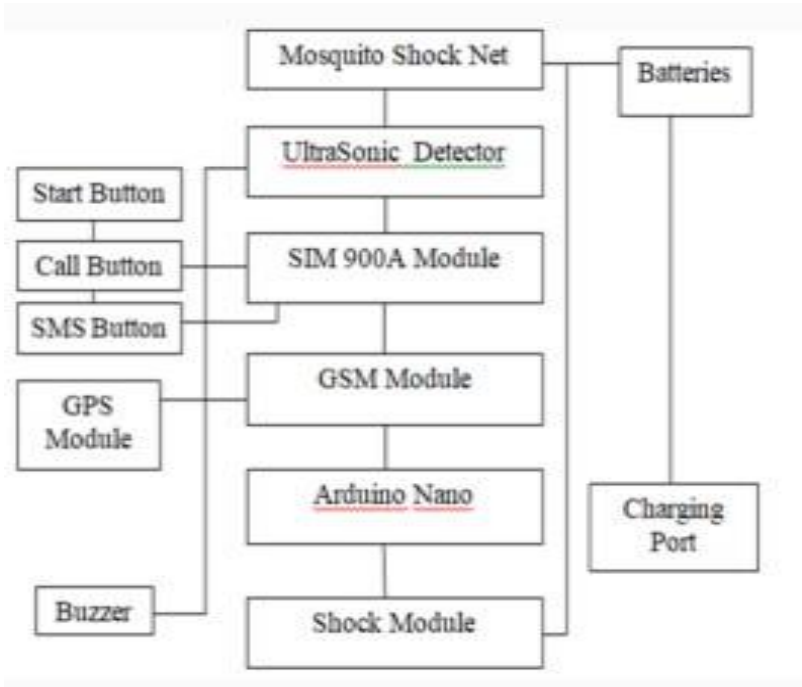
Name of The Co-Guide: Dr.H.V.Ganvir

**Abstract:** This research paper introduces the concept of Smart Safety Footwear equipped with GPS functionality and a Current Net. The integration aims to enhance safety for outdoor workers, adventurers, and individuals in Mosquito prone regions. The paper explores the design, implementation, and applications of this footwear solution in various settings. Keywords: Smart Safety Footwear, GPS, Current Net, Outdoor Safety, GSM Module, Wearable Technology.

#### Introduction:

In the contemporary world, safety is of utmost importance. This study explores an innovative concept that intends to improve everyone's safety and well-being by fusing fashion and technology in a fresh way. Our research is focused on developing a specific pair of shoes with a self defence mechanism, an ultrasonic sensor for navigation, and a GSM tracking system. With a single wearable solution that combines personal protection, navigation, and efficient communication, this ground- breaking invention aims to empower users. The goal of this project is to build a smart gadget that can help everyone who is feeling insecure and threatened. we put our effort into developing a Smart Foot Device with a view of everyone's Safety. Every day, everywhere, someone fights to be safe and defend themselves from the incredibly disrespectful men's roving eye that molests assaults, and abuses women's dignity.

#### Block diagram:



#### Conclusion and Future scope:

**Conclusion:** To sum up, this study paper captures the essence of our novel idea on assistance footwear that uses GPS and a mosquito current net. We enumerate the salient features, accomplishments, and possible advantages of our solution. This part sets the reader up for the future directions covered in the next section by providing a succinct summary of the relevance and influence of our effort. There is always space for growth and improvement in any ground-breaking project. Here, we list possible directions for further development and improvement. These recommendations cover both specific technical improvements and more general uses of our technology. We encourage academics, engineers, and innovators to build on our work and further the field of women's safety and assistive technologies by offering a roadmap for future endeavors.

**Future scope:** The future scope of "smart safety footwear using GPS with mosquito current net" lies in enhanced safety features and health monitoring for outdoor workers. This technology can offer real-time tracking, alert systems for hazardous areas, and protection against insect-borne diseases. It has the potential to revolutionize worker safety in industries such as construction, agriculture, and forestry, improving productivity and reducing health risks.

## Results:

Presenting the project's findings and conclusions is essential in the quest to develop a dependable and successful solution. This section presents our GSM tracking system's performance results, the ultrasonic sensor's efficacy in detecting obstacles, and the learnings from testing and user feedback. We offer user testimonies, statistics, and empirical data that taken together offer a thorough picture of the practical application and promise of our ground-breaking footwear. Important ethical problems are raised by our unique footwear's self-defense mechanism. This section critically analyses our project's ethical implications for AI, with an emphasis on the use of shock mechanisms to self-defense. We also discuss consent and privacy concerns with the GSM tracking technology. Our goal in addressing these ethical issues is to offer a thorough analysis of the moral and societal implications of our technology



**References:** 1. Women's Safety with a Smart Foot Device S. Pravinth Raja; S. Sheeba Rachel; Sapna R, 2021 4th International Conference on Computing and Communications Technologies (ICCT) 2. Smart Shoes for Women Safety with Implicit Triggers Manikrao Dhore; Himanshu Bhatia; Shraddha Bagav; Prajwal Kadam; Amey Dhuri, S.Mandapati, S. Pamidi and S. Ambati, "A mobile based women safety application, IOSR Journal Computer Engineering , vol. 17, no. 1, pp. 29-34, 2015.

#### CO-PO/PSO Mapping:

	Project Phase-II	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
Couse Outcome	Students will be able to														
CO-1	<b>Presentation Skill:</b> Students will be able to deliver oral presentations effectively, emphasizing logical organization of relevant content and information, appropriate style, pacing, and body language. They will demonstrate proper handling of questions and effective time management during presentations.	1	1								3	2	1		
CO-2	<b>Technical Skill:</b> Students will demonstrate comprehensive knowledge of contemporary issues in their chosen field of research, enabling them to address current challenges and developments within the industry or academic discipline.	3	3	3	3	3	3	3	3			3	3	3	3
CO-3	<b>Team Work, ethics, professionalism:</b> Students will exhibit competency in teamwork, professionalism, integrity, and ethical behavior throughout the project. They will collaborate effectively with team members, respecting diverse perspectives and contributing positively to group dynamics.								2	2	3	2			
CO-4	<b>Complex Problem Solving:</b> Students will critically analyze a selected topic, recognizing, formulating, and solving problems inherent to the subject matter. They will apply problem-solving strategies to achieve practical outcomes relevant to the project's objectives.	1	1	1	1		3	3	3	3	3	3	2	2	2
CO-5	<b>Life Long Learning and Project management:</b> Students will engage in lifelong learning by actively participating in competitions and project management activities. They will develop skills in project planning, execution, and evaluation, fostering continuous improvement and professional development.									3	3	3	3		
		1.67	1.67	2.00	2.00	3.00	3.00	2.67	2.50	3.00	2.50	2.00	2.50	2.50	2.50