

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-**

**590 018**



**A MICRO PROJECT REPORT ON  
“Piezoelectric Based Visitor Sensing Welcome Mat”**

**Submitted By,**

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**Under the Guidance of**

**Ms. Shilpa  
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**ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY**

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**CERTIFICATE**

This is to certify that the Micro-Project entitled **"Piezoelectric Based Visitor Sensing Welcome Mat"** has been Successfully Completed by

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The bonafide students of **Department of Basic Sciences, Alva's Institute of Engineering and Technology**, affiliated to **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI**, during the academic year 2020-2021. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report. The report has been approved as it satisfies the academic requirements in respect of Micro-Project work prescribed for Bachelor of Engineering.

**Ms. Shilpa**

**Mini Project Guide**

**Dr. Ramaprasad A.T,**

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## **ABSTRACT**

What kind of doormat do you have? Is it just a simple carpet for wiping your feet before entering? A doormat should be capable of much more. As a result, we've created a project that alerts you when a visitor or guest approaches the doormat. We use piezoelectric sensors here, which use the piezoelectric phenomenon to convert acceleration, force, and pressure into electric impulses. This notifies the user by turning on the buzzer. As a result, there is no need for a doorbell because the doormat can automatically identify visitors and alert them on their behalf. Mat can actively detect whether there is a change in pressure from someone or something standing or sitting on the Mat thanks to the built-in Piezo sensor. It's also not just a doormat. It's a weight-sensitive layer of smart foam that you can place under your doormat or anywhere else in your home where pressure-sensitive responses are required.