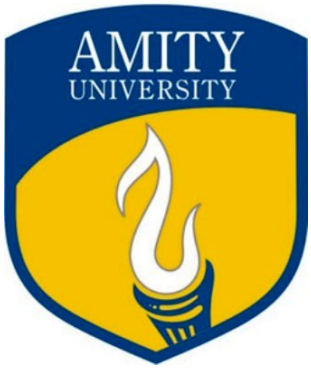
# MAJOR PROJECT REPORT
# ON

## MACHINE VISION BASD SMART PARKING AND ENVIRONMENT MANIPULATION USING BRAIN

**Submitted to**
AMITY SCHOOL OF ENGINEERING & TECHNOLOGY




Major Project Evaluation
For The Partial Fulfilment for the degree of
Bachelor of Technology
In
Information Technology
Submitted By:

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**(A2305315020)**

Under the guidance of

**Mr. Vikas Deep**
**&**
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**AMITY SCHOOL OF ENGINEERING AND TECHNOLOGY**
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# DECLARATION

I, RASHBIR SINGH student of B.TECH 8th Semester, studying at Amity University, Noida, hereby declare that the minor project report on "**MACHINE VISION BASD SMART PARKING AND ENVIRONMENT MANIPULATION USING BRAIN**" submitted to Amity University, Noida in partial fulfilment of Degree of Bachelor's in Information Technology is the original work conducted by us. Under the Guidance of Mr. Vikas deep, Assistance professor, Department of Information and Technology, Amity School of Engineering and Technology, AUUP Noida and Mr. Purushottam Sharma, Assistant Professor, Department of Information Technology, Amity School of Engineering & Technology, AUUP, Noida. The information and data given in the report is authentic to the best of my knowledge. This minor project report is not being submitted to any other University for award of any other Degree, Diploma and Fellowship.

Date:17-May-2019

**Rashbir Singh**

# CERTIFICATE

This is certify that this report entitled "**MACHINE VISION BASD SMART PARKING AND ENVIRONMENT MANIPULATION USING BRAIN**" is a bonafide record of the work done by Rashbir Singh [8-IT-1] enrolment no. A2305315020 of this institute in its B.Tech-IT [2015-2019] program for Major project Evaluation 2018-2019, under the guidance of faculty guide, Mr.Vikas deep, Assistant professor, Department of Information Technology ,Amity School of engineering and technology, AUUP, Noida and and Mr. Purushottam Sharma, Assistant Professor, Department of Information Technology, Amity School of Engineering & Technology, AUUP, Noida

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# ACKNOWLEDGEMENT

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**RASHBIR SINGH**

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# ABSTRACT

This project uses the latest technology like

1. Cloud server
2. IoT
3. Computer vison

combined with Bio-Sensors like EEG to detect persons brainwaves like

1. Alpha
2. Beta
3. Gamma
4. Delta
5. Theta

Based on this we get persons attention level that further communicate by sending signal of command using infrared led whereas each appliance now a days have infrared reciever and hence the led will mimic that remote and send commands to control the device. The device is detected using computer vision. The device also support cloud server functionality, hence in future the device code can be deployed on in-house cloud sever and work as an API to make device more robust and scalable.

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