



**Department of Electronics & Tele-Communication Engineering**

**JADAVPUR UNIVERSITY** Kolkata - 700032, West Bengal, India

Telephone +91-33-2414-6002 (Direct) / +91-33-2457 2404 (Head)

+91-33-2457 2402 (Office)

<http://www.jaduniv.edu.in> (University Website) / [www.etceju.org](http://www.etceju.org) (Departmental Website)

Email: [hodetce@jadavpuruniversity.in](mailto:hodetce@jadavpuruniversity.in)

---

**TO WHOM IT MAY CONCERN**

July 30, 2025

This is to certify that **Srijita Karmakar**, an undergraduate student of second year fourth semester of IISER Kolkata, has successfully completed her summer intern on "*Development of a Mobile Robot and Software for Path-Planning amidst Obstacles using Intelligent Algorithm*" under the guidance of the undersigned in Control Engineering and Artificial Intelligence Lab, Department of Electronics and Tele-Communication Engineering, Jadavpur University for 2 months in June-July, 2025. During her tenure at Jadavpur University, she learnt the principles of mobile robot construction using an Arduino Uno board, employing ATmega processor as the main microcontroller. She also learnt to develop path-planning algorithms and their coding in Python for realization on the hardware mentioned above.

The research team of the AI Lab congratulates Ms. Srijita Karmakar for her hard effort to learn new concepts and decipher her views among other research team members. Ms. Srijita Karmakar is strongly encouraged to undertake further research in the allied topics of Mobile Robotics and Machine Intelligence. The AI Lab team wishes her success in all her future research endeavors.

**Prof. Amit Konar**  
Research Adviser,  
AI Lab, ETCE Dept., JU