

<b>BIPRA BISWAS</b> Computer Science Graduate Vellore Institute of Technology (2021-2025)	<b>Visa Status:</b> Permanent Resident (Japan) <b>Phone:</b> +81 80-7074-5577 <b>Email:</b> <a href="mailto:bipra.biswas309@gmail.com">bipra.biswas309@gmail.com</a> <a href="mailto:biprobiswas15@gmail.com">biprobiswas15@gmail.com</a> <b>LinkedIn:</b> <a href="https://www.linkedin.com/in/bipra-biswas-b1a1b727a">https://www.linkedin.com/in/bipra-biswas-b1a1b727a</a>
A dedicated and high-achieving Computer Science graduate with a specialization in Artificial Intelligence and Robotics. Possesses a strong academic foundation in algorithms, data structures, machine learning, and software development. Passionate about technology and innovation, actively seeking a dynamic entry-level role to apply skills and grow further in the industry. Recognized for strong problem-solving abilities, attention to detail, and a collaborative mindset, with a drive to make a meaningful impact in the tech world.	
<b>Language:</b>	Japanese JLPT N3 ( Not passed), English (Business), Hindi(native), Bengali(native)

Professional Experience		
Academic Collaboration – TCS Japan (Mentor: TCS Employee)		Internship (unofficial)
		OCT to NOV 2023
<b>IOT Systems Development</b>	<ul style="list-style-type: none"><li>Developed a Digital Smart Lock System with IoT and embedded technologies.</li><li>Implemented RFID, fingerprint, and keypad authentication for enhanced security.</li><li>Optimized hardware-software integration for performance and efficiency.</li><li>Guided by a mentor with experience Tata Consultancy Services (TCS) Japan.</li></ul>	

Projects	
Vellore Institute of Technology	
	2021-2025
<b>SafeOut : Smart Health Advisory System</b>	<ul style="list-style-type: none"><li>Developed an AI-powered health monitoring system that provides personalized wellness recommendations based on real-time weather, activity levels, and user data.</li><li>Integrated features like hydration reminders, sunscreen alerts, and UV exposure warnings, enhancing proactive health management.</li></ul>
<b>Virtual Whiteboard using Machine Learning in Python</b>	<ul style="list-style-type: none"><li>Developed a virtual whiteboard app with real-time drawing and handwriting recognition, <b>achieving 90% accuracy</b> through iterative model improvement.</li><li>Implemented gesture-based controls and multi-user support to enhance functionality.</li></ul>
<b>Walking Obstacle Detecting Bot using ROS:</b>	<ul style="list-style-type: none"><li>Developed and programmed a sensor-equipped robot using the Robot Operating System (ROS) for autonomous obstacle detection and navigation, <b>achieving a 95% success rate in field tests.</b></li><li>Implemented advanced path planning and obstacle avoidance algorithms to enhance the robot's autonomous capabilities.</li></ul>
<b>Facial Recognition &amp; Emotion Detection System</b>	<ul style="list-style-type: none"><li>Developed an AI-driven facial recognition system that detects and classifies emotions using deep learning and computer vision techniques.</li><li>Implemented real-time emotion analysis for applications in user engagement, mental health assessment, and security monitoring.</li></ul>
<b>VisionX: AI-Powered Video Surveillance System</b>	<ul style="list-style-type: none"><li>Developed VisionX, an AI-powered video surveillance system for real-time anomaly detection in smart cities using OpenCV and Gemma with Ollama</li><li>Integrated motion detection, event triggering, and automated alerts, enhancing public safety through proactive monitoring.</li></ul>

Course	Institute	Year	%/CGPA
B.Tech in Computer Science and Engineering with specialization in Artificial Intelligence and Robotics	Vellore Institute of Technology	2025	7.6/10
Class 12th	India international school in Japan	2021	82%
Class 10th	India international school in Japan	2019	80%

Skills	
<b>Interpersonal</b>	Strong interpersonal skills, Proactive and self-motivated, Leadership skills
<b>Languages</b>	C, Python, SQL, HTML,CSS, JS, R programming
<b>Technologies</b>	Data Structures and Algorithms (DSA), Web Development (WebD), Machine Learning and its libraries, Object oriented programming ,Artificial intelligence, Neural Networks , Software development lifecycle (SDLC)
<b>Libraries</b>	Pandas, Numpy, Matplotlib, Scikit-Learn
<b>Tools</b>	VS Code, Tableau, Power BI, Jupyter Notebook
<b>certifications</b>	• NSDC Certified Python Programmer • Java Training – IIT Bombay Spoken Tutorial Program • PHP & MySQL Training – IIT Bombay Spoken Tutorial Program • Microsoft Certified: Azure Fundamentals

Extra-Curricular Activities:	
<b>Head, Venture Capitalist Club (NexSeed)</b>	<ul style="list-style-type: none"><li>Organized workshops and guest lectures to provide practical insights into venture capital and startup ecosystems.</li><li>Coordinated pitch competitions, offering a platform for aspiring entrepreneurs to showcase ideas and receive feedback from industry experts.</li><li><b>Increased club membership by 25%</b> and fostered partnerships with local startups and venture capital firms for networking and mentorship opportunities.</li></ul>
<b>Member, Aerospace Club</b>	<ul style="list-style-type: none"><li>Collaborated on designing and building drones, gaining hands-on experience in aerospace engineering and teamwork.</li><li>Conducted regular testing and refinement sessions to ensure the reliability and performance of aerospace models.</li><li>Contributed to the development of technical documentation and project reports, enhancing communication and documentation skills within the team.</li></ul>