

DIPTI DHAWADE



+91 8421530421 • dipti.dhawade.ug23@plaksha.edu.in

[Linkedin](#)

[Github](#)

EDUCATION

BTech - Computer Science and Artificial Intelligence, Plaksha University	8.51	2027
12th - Jawahar Navodaya Vidyalaya Ahmednagar	96.4%	2021
10th - Jawahar Navodaya Vidyalaya Ahmednagar	96.2%	2019

PROJECTS

Autonomous Underwater Vehicle (AUV) Prof. Sandeep Manjanna	<i>Aug 2025 - Present</i>
<ul style="list-style-type: none">Built a real-time robotic system capable of doing underwater object detection with sensor-based navigation and manipulation, and evaluated robustness under real-world constraints (latency, low visibility, noisy sensors).ROS2, C++, Python	
Mobile-Hi-SAM Prof. Anupam Sobe	<i>Aug 2025 - Dec 2025</i>
<ul style="list-style-type: none">Designed a parameter-efficient hierarchical text segmentation model for edge deployment, integrating MobileSAM's TinyViT encoder & Hi-SAM pipeline with a custom hierarchical decoder for word, line & paragraph segmentation on HierText dataset.Achieved ~62% of Hi-SAM's Panoptic Quality (PQ) using only 12.6M parameters, resulting in an =98% reduction in model size.Python, PyTorch	
NoteScanner	<i>September 2025</i>
<ul style="list-style-type: none">Developed an application using RAG-based pipeline for querying handwritten notes. The system uses OCR for extraction, ChromaDB for vector storage, and GroQLLM to enable users to chat with their course material via FastAPI and React.Python, FastAPI, React, ChromaDB, Docker	
Chronic Wound Status Assessment using AI Prof. Siddharth, Prof. Rucha Joshi	<i>Jan 2025 - May 2025</i>
<ul style="list-style-type: none">Developed an AI-based chronic wound monitoring system using microscopic images of pH-sensitive fluorescent silk fibroin(SF) hydrogels to enable real-time, non-invasive pH estimation for chronic wound assessment.Implemented ResNet-18 feature extraction + Random Forest classification, ensuring robustness to imaging variability.Python, OpenCV	

EXPERIENCE

Reimagining Higher Education Foundation, Plaksha University - Intern	<i>Oct 2024 - May 2025</i>
<ul style="list-style-type: none">Coordinated high-stake events like Founders' Day and Foundation Day at Plaksha University & conducted campus tours for founders, prospective students, and visitors. Researched and managed prospect donors list to support fundraising.	
Centre for Thinking, Language and Communication (CTLC), Plaksha University - Intern	<i>Sep 2023 - May 2024</i>
<ul style="list-style-type: none">Reviewed and synthesized scholarly literature to support academic research papers.	
Action in Rural Technology and Service (ARTS), Shrikakulam, Andhra Pradesh - Intern	<i>June 2023 - July 2023</i>
<ul style="list-style-type: none">Researched economic and financial literacy in rural and tribal Savara communities; developed a project enabling small business creation, loan access, and sustainable income generation using local resources.	

SKILLS

- Programming Languages:** C++, Python, PostgreSQL, Javascript
- Frameworks:** Express.js, ROS2, Arduino
- Libraries:** React.js, PyTorch, OpenCV, NumPy, Pandas, Matplotlib

LEADERSHIP & ACHIEVEMENTS

- Member of the **DS Brar Centre for Girls and Women in STEM (GWiST)**, Plaksha University. Promote gender equity in STEM through technical workshops and mentorship initiatives.
- Millennium Fellow 2024, MCN & United Nations:** Led a social impact project aligned with SDG 8: Decent Work and Economic Growth empowering rural and tribal communities toward sustainable livelihoods.
- OxNet- Pembroke College, Oxford University (Sep 2020):** Selected for a competitive **English Language & Literature** program; enhanced analytical writing and critical thinking skills.
- Young Scholars Program - Ashoka University (May 2020):** Led a startup ideation project, sharpening creativity, teamwork, and persuasive communication skills.
- Vice Head Girl at Jawahar Navodaya Vidyalaya:** Successfully managed the boarding program, fostered a strong school community of **500 students** and ensured student safety and well-being.
- Competed in **National Inter-School Sports & Games** against participants from **600+ schools** across India.