



AQUACULTURAL ENGINEERING

EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2027	M.TECH	IIT Kharagpur	8.96 / 10
2025	Agricultural Engineering	Dr. Panjabrao Deshmukh Krishi Vidyapeeth Akola	8.26 / 10
2019	Higher Secondary School Certificate	Board of Secondary Education Madhya Pradesh Bhopal	83%
2017	High School Certificate	Board of Secondary Education Madhya Pradesh Bhopal	84.6%

PROJECTS

**Autism Prediction Using Machine Learning**

Developed a supervised machine learning model to predict Autism Spectrum Disorder using clinical and behavioral data. Performed data preprocessing, feature selection, model training, and performance evaluation using Python-based ML techniques.

**Block-wise Waterbody Estimation and Annual Trend Analysis over West Bengal using GIS and Remote Sensing**

Estimated spatial distribution of waterbodies at block level using multi-temporal satellite data. | Analyzed yearly trends and changes through GIS-based spatial and temporal analysis. | Utilized remote sensing techniques and GIS tools for mapping, classification, and visualization.

**Development of Portable Multi-Purpose Grain Cleaner**

Designed and fabricated a semi-automated, low-cost grain cleaning machine. Conducted performance evaluation, power analysis, and cost-benefit analysis focusing on portability, consumption, and maintenance.

**Mapped and geolocated tourist destinations in Chhindwara district with route analysis using QGIS.**

INTERNSHIPS

**AICRP on Post Harvest Engineering & Technology, and ELU, Dr. PDKV, Akola MH:** Learned post-harvest engineering techniques and food processing technologies. Gained knowledge of sales and marketing in the agri-food sector.

TRAINING

**Central Farm Machinery Training & Testing Institute, Budni MP:** Operated and maintained tractors and agricultural machinery. | Studied tractor systems and assemblies. | Repaired and maintained 5 HP single-cylinder diesel engines. | Learned tractor testing methodologies.

**ICAR-Indian Institute of Soil & Water Conservation Research Centre, Kota RJ:** Studied watershed management techniques for soil and water conservation. | Worked with remote sensing, Google Earth Pro, and QGIS software

POSITIONS OF RESPONSIBILITY

**Manager**, Innovation and Incubation Club, IIT KGP. **Library Secretary**, MMM Hall of Residence, IIT KGP. **Media Content Team Head**, GYWS, IIT KGP. **Prefect**, Raigarh Boys Hostel, Dr. PDKV Akola. **Executive Body Member**, Dr. PDCF Akola.

COMPETITION/CONFERENCE

**Vice Captain, TIFAN 2025 Competition** –Automated Vegetable Transplanter.

**Represented University** at 13th Bhartiya Chhatra Sansad 2024, MIT-WPU Pune.

AWARDS AND ACHIEVEMENTS

Secured **1st rank** in B.Tech (Agricultural Engineering) with the **highest CGPA** in the graduating batch.

**Felicitated by Dr. PDCF, Akola** for securing a **GATE** rank.

SKILLS AND EXPERTISE

Machine learning fundamentals and data analysis using Python (NumPy, Pandas, Matplotlib) and MySQL | Spatial-temporal data analysis, GIS, and remote sensing | Time-series analysis, data visualization, and analytical reporting | Python, C/C++, AutoCAD, MATLAB, SolidWorks, ANSYS, Arduino

COURSEWORK INFORMATION

Agricultural Engineer pursuing M.Tech in Aquacultural Engineering at IIT KGP with strong expertise in machine learning, GIS, and data analytics. Experienced in spatial-temporal data processing, time-series analysis, visualization. Proven ability to translate real-world engineering problems into data-driven solutions, supported by hands-on system design and experimental analysis.

EXTRA CURRICULAR ACTIVITIES

**Volunteer, NSS** (National Service Scheme).

Organized and led the Annual Social Gathering 2025 as a **Steering Committee Member**.