STUDENT PARTNER FLAGSHIP PROGRAM

About the program

IMMERSIVE TECH PROGRAM

We are proposing to create a strategic hiring and grooming program for your students:

- Create an Agri tech club in the Institute. Students interested in solving tech and non-tech problem statement should be encouraged to join.
- Technology will mostly focus on mobility, AI, ML, IoT, AR, Hardware and electronic designs. Non-tech will focus on graphic design, digital marketing, data analysis, video production.
- Most of the problem statement will be real time and part of future research work.
- Team GormalOne can allocate time for students for talks and workshop. (We are not an institute to train, expectation to train from scratch should be avoided). We can guide and spend required time with students to help them on required learning curve.
- This will provide us a better insight about students leading to an efficient hiring program.

KEY BENEFITS

- Sponsorship for promising students for field visits.
- Internship programs for selected students..
- Provide advisory on final year project. *(Funding for selected projects)*
- Access to industry experts and mentors.
- Insight to agri- business technology.
- Solve real world challenges and work on live projects.
- Certifications.

Come & be a Tech-Insider!

Reach out to us at **hr@gormalone.com**

To know more about us visit - https://gormalone.com/ & https://www.nitara.ai/

NITARA Innovation Catalyst Program (NICP)

Empowering Future Agri/Dairy Innovators

At NITARA (GormalOne LLP), we recognize the importance of fostering innovation in the Agri and Dairy industry. This Innovation Catalyst Program empowers students to work on impactful hardware and software projects, creating solutions that benefit dairy industry and farmers while advancing their own careers. The programme will include Machine learning and AI to help FPOs, Impact organisations, Relevant Industries get insightful data points for making strategic decisions whilst ensuring farmer empowerment. The tools provided under this solution will also help farmer organisations to bring consistency, dependability, and sustainability to the Dairy and Agriculture.

NITARA leverages Internet of Things (IoT), Big Data, cloud, data analytics among others to improve dairy supply chain parameters, including milk production, milk procurement practices, cold chain, animal insurance, and farmer payments.

About Nitara:

GormalOne LLP is an innovation-led Agri tech organization focused on building AI-led digital solutions in the Dairy Industry. Nitara our flagship product is an Artificial intelligence-led Dairy focused technology platform on cattle management designed for small scale farmers where they can create a efficient herd management system and connect to services such as breeding, telehealth, quality semen etc. Additionally, the platform provides access to insemination technicians, paraprofessionals, and veterinarians etc. Currently, our operational focus is in Gujarat and Uttar Pradesh where we have onboarded 90,000+ cattle on our platform.

Program Overview: The NITARA Innovation Catalyst Program aims to foster innovation and creativity among students and professionals in the Agri and Dairy sector. Participants will have the opportunity to work on cutting-edge projects that leverage technology to address challenges faced by farmers and improve agricultural practices.

Our Vision:

NITARA envisions a precision dairy farming system for small-scale dairy producers, empowering them to raise highly productive animals. NITARA aims to create a comprehensive digital dairy platform that connects all dairy stakeholders fostering collaboration, productivity enhancement and empowerment.

Our Mission:

1. **Digital empowerment**

   Revolutionizing the dairy ecosystem with AI-led technology, focused on enhancing the quality and quantity of milk.

2. **Empowering ground-users**

   Our mission extends to driving data-driven dairying and business for dairy farmers and service providers. AITs, vets, paravets, and milk collectors can leverage our platform for enhanced efficiency and productivity.

3. **Data-driven insights**

At the company level, we aim to offer data-driven insights for dairies, animal healthcare companies, feed companies, and genetic companies. Our system provides valuable information for informed decision-making and improved outcomes.

Nitara's solution offerings:

1. **Nitara mobile apps**

- NITARA FARMER (A Complete herd management software)
- NITARA FRIEND (A software for Vets, Paravets, AITs, VLC secretaries to manage their business & connect with farmers)

2. **Nitara web dashboard**

For farm-specific analytics, insights & reports.

3. **24/7 assistance**

- Remote call-support
- Tech-sup

Who It's For:

- Individuals passionate about Agri and Dairy technology, seeking short to medium-term projects aligned with their interests and skills.
- Independent professionals looking for flexible work arrangements and opportunities for growth.
- Students with innovative projects in Dairy/Agri hardware and software can collaborate with us, receiving mentorship and support.

Benefits of Joining NITARA's Program:

- **High-Impact Projects:** Strategic assignments requiring domain expertise and innovative thinking.
- **Structured Compensation:** Competitive pay with performance bonuses upon project completion.
- **Flexibility:** Consultants can tailor their work arrangements to suit personal commitments.
- **Opportunity for Growth:** Access to learning resources and professional development opportunities.
- **Uniquely NITARA Experience:** Collaborate closely with our highly expert domain and Tech teams and enjoy exclusive benefits.

Apply Today and Make an Impact! Share your innovative project ideas with the subject line on hr@gormalone.com, info@gormalone.com

Join our NITARA Innovation Catalyst Program to work on transformative projects that benefit dairy farmers and contribute to industry innovation. Together, let's create a brighter future for Agri and Dairy technology with GormalOne LLP!

Project 1: Chatbot-LLM Model

Brief and Objective:

Chatbot-LLM Model specifically for the dairy business. This entails using machine learning techniques to construct a chatbot that can efficiently answer dairy-related questions and tasks. Undertaking this project involves opportunity to enhance dairy/agri domain-based learnings.

Role and Responsibilities:

1. **Database creation:** Create a dairy database for development of chatbot for dairy industry.
2. **Collaboration:** Work closely with our team to develop a Chatbot-LLM Model specifically designed to handle dairy-related questions and tasks.
3. **LLM Training:** Engage in the training of the Language Model to ensure the project progresses smoothly and efficiently.
4. **Dairy Tech Project Participation:** Contribute to a Dairy Tech Project focused on optimizing operations for the benefit of dairy professionals.
5. **Exposure to AI Projects:** Gain experience in various LLM AI projects, including conducting real-time research with practical applications.
6. **Empowerment of Farmers:** Assist in empowering farmers globally through innovative technological solutions.
7. **Remote Work:** Enjoy the flexibility of working remotely from your home location.

Basic Requirements/Qualifications:

1. Pursuing bachelor's degree in agriculture, Veterinary Science, or related field (preferably 3rd or 4th Semester students).
2. Prior Internships with dairy farming practices and cattle management will be preferred.
3. Proficiency in data collection tools and software such as MS Office (Excel, Word, Presentation etc).

Basic Competencies:

1. **Basic Dairy Knowledge:** Understanding of dairy farming practices and the importance of water intake in cattle management.
2. **Data Collection Skills:** Ability to accurately measure and record water intake frequencies and amounts.
3. **Data Analysis Skills:** Proficiency in analyzing data to identify trends and correlations.
4. **Communication Skills:** Effective communication skills to convey findings, recommendations, and collaborate with stakeholders.

Duration:

The project should span a minimum of 2-3 months to cover at least one season and can extend up to a year to track cattle through all seasons effectively.

Project 2: Heat Stress Analysis

Brief and Objective:

The objective of this project is to investigate the impact of heat stress, specifically temperature and humidity, on cattle productivity. The project aims to quantify the economic implications of heat stress on farmers' income and assess the feasibility and profitability of potential solutions. By analyzing the effect of heat stress on cattle and their productivity, we seek to provide valuable insights to improve cattle management practices.

Roles and Responsibilities:

1. **Research Analyst:** Conduct research to gather data on heat stress and its impact on cattle productivity.
2. **Field Observers:** Observe cattle and collect relevant information such as stage of life cycle, lactation stage, pregnancy stage, and milk output.
3. **Data Analyst:** Analyze collected data to establish correlations between temperature variations, behavioural changes in cattle, and milk production.
4. **Project Coordinator:** Oversee the project timeline and ensure smooth execution of activities.

Basic Competencies:

1. **Basic Dairy Knowledge:** Understanding of dairy farming practices and cattle management.
2. **Data Collection Skills:** Ability to accurately record and document observations and data.
3. **Data Analysis Skills:** Proficiency in data analysis techniques to identify trends and correlations.
4. **Project Management Skills:** Capacity to coordinate project activities and manage timelines effectively.
5. **Communication Skills:** Clear communication skills to convey findings and collaborate with team members.

Basic Requirements/Qualifications:

1. Pursuing bachelor's degree in agriculture, Veterinary Science, or related field (preferably 3rd or 4th Semester students).
2. Prior Internships with dairy farming practices and cattle management will be preferred.
3. Proficiency in data collection tools and software such as MS Office (Excel, Word, Presentation etc).

Duration:

The project should span a minimum of 2-3 months to cover at least one season and can extend up to a year to track cattle through all seasons effectively.

Project 3: Water Intake Analysis

Brief and Objective:

The objective of this project is to assess the impact of water intake on cattle health and productivity, particularly in areas with varying water availability. The project aims to quantify the degree of change in cattle health and productivity resulting from alterations in water intake. It also seeks to evaluate the feasibility and profitability of increasing or improving water intake, especially in water-scarce areas where it may incur significant costs.

Roles and Responsibilities:

1. **Research Analyst:** Conduct research to gather data on water intake patterns and their effects on cattle health and productivity.
2. **Field Observers:** Measure the frequency and amount of water intake by cattle and record relevant information such as stage of life cycle, lactation stage, pregnancy stage, and milk output.
3. **Data Analyst:** Analyze collected data to identify correlations between water intake variations, cattle behaviour, and milk production.
4. **Water Quality Analyst:** Assess water quality by measuring total dissolved solids (TDS) and its potential impact on cattle health and yield.
5. **Project Coordinator:** Manage project activities and ensure adherence to timelines.

Basic Competencies:

1. **Basic Dairy Knowledge:** Understanding of dairy farming practices and the importance of water intake in cattle management.
2. **Data Collection Skills:** Ability to accurately measure and record water intake frequencies and amounts.
3. **Data Analysis Skills:** Proficiency in analyzing data to identify trends and correlations.
4. **Water Quality Assessment:** Familiarity with techniques for measuring TDS and assessing water quality.
5. **Project Management Skills:** Capacity to coordinate project activities and ensure smooth execution.
6. **Communication Skills:** Effective communication skills to convey findings and collaborate with team members.

Basic Requirements/Qualifications:

1. Pursuing bachelor's degree in agriculture, Veterinary Science, or related field (preferably 3rd or 4th Semester students).
2. Prior Internships with dairy farming practices and cattle management will be preferred.
3. Proficiency in data collection tools and software such as MS Office (Excel, Word, Presentation etc).

Duration:

The project can span a minimum of 2-3 months to observe quick results in changes in water intake. However, it can be extended up to a year to account for seasonal variations in water availability and temperature, especially in areas with distinct seasonal changes.

Project 4: Soil Quality Assessment

Brief and Objective:

The objective of this project is to evaluate soil quality and its impact on crop productivity in agricultural areas. The project aims to assess various soil parameters, such as pH levels, nutrient content, and moisture levels, to determine their influence on crop health and yield. Additionally, the project seeks to identify sustainable soil management practices that can optimize crop production while preserving soil health and fertility.

Roles and Responsibilities:

1. **Research Analyst:** Conduct research to gather data on soil quality parameters and their effects on crop productivity.
2. **Field Technicians:** Collect soil samples from agricultural fields and perform on-site analysis to measure pH levels, nutrient content, and moisture levels.
3. **Data Analyst:** Analyze collected data to identify correlations between soil quality indicators, crop performance, and agricultural practices.
4. **Soil Management Expert:** Recommend sustainable soil management practices based on data analysis to improve crop yield and soil health.
5. **Project Coordinator:** Coordinate project activities, including field sampling, data analysis, and reporting, to ensure project objectives are met.

Basic Competencies:

1. **Basic Agricultural Knowledge:** Understanding of soil science principles and agricultural practices related to soil management and crop production.
2. **Data Collection Skills:** Ability to accurately collect and analyze soil samples and record relevant data in the field.
3. **Data Analysis Skills:** Proficiency in statistical analysis and data interpretation to identify trends and correlations in soil quality data.
4. **Soil Management Expertise:** Familiarity with sustainable soil management practices and their application in optimizing crop productivity and soil health.
5. **Project Management Skills:** Capacity to manage project timelines, resources, and team members to ensure project goals are achieved.
6. **Communication Skills:** Effective communication skills to convey findings, recommendations, and collaborate with stakeholders.

Basic Requirements/Qualifications:

1. Pursuing bachelor's degree in agriculture, Veterinary Science, or related field (preferably 3rd or 4th Semester students) .
2. Prior Internships with dairy farming practices and cattle management will be preferred.
3. Proficiency in data collection tools and software such as MS Office (Excel, Word, Presentation etc).

Duration:

The project can span a minimum of 2-3 months to cover different agricultural seasons and variations in soil conditions. However, it can be extended up to a year to assess long-term impacts of soil management interventions on crop productivity and soil health.

Project 5: Behavioural Analysis

Brief and Objective:

The objective of this project is to investigate the effects of various events on cattle behaviour, aiming to understand changes in behaviour patterns and their implications. The project seeks to quantify the degree of deviation from standard behaviour exhibited by cattle during events such as vaccination, calving, and disease. Additionally, it aims to determine the duration of abnormal behaviour and their potential impact on the overall behavioural repertoire of cattle.

Roles and Responsibilities:

1. **Research Analyst:** Conduct research to identify relevant behaviour and develop an ethogram for recording and analyzing cattle behaviour.
2. **Field Observers:** Record baseline behaviour of cattle and observe and document changes in behaviour following events such as AI, vaccination, calving, and disease.
3. **Data Analyst:** Analyze collected behavioural data to identify deviations from standard behaviour patterns and assess the duration and frequency of abnormal behaviours.
4. **Behavioural Specialist:** Interpret behavioural data and draw conclusions regarding the effects of events on cattle behaviour, providing insights into potential welfare and management implications.
5. **Project Coordinator:** Manage project activities, including data collection, analysis, and reporting, to ensure project objectives are achieved within the specified timeline.

Basic Competencies:

1. **Basic Dairy Knowledge:** Understanding of cattle behaviour and familiarity with common events that may influence behaviour, such as vaccination, calving, and disease.
2. **Data Collection Skills:** Ability to accurately record and analyze cattle behaviour, including the development of ethograms and behavioural observation protocols.
3. **Data Analysis Skills:** Proficiency in analyzing behavioural data to identify patterns, trends, and deviations from standard behavior.
4. **Behavioral Assessment Expertise:** Knowledge of behavioral science principles and their application in assessing animal welfare and management practices.
5. **Project Management Skills:** Capacity to coordinate project activities, manage timelines, and ensure adherence to project objectives.
6. **Communication Skills:** Effective communication skills to convey findings, interpretations, and recommendations to stakeholders.

Basic Requirements/Qualifications:

1. Pursuing bachelor's degree in agriculture, Veterinary Science, or related field (preferably 3rd or 4th Semester students) .
2. Prior Internships with dairy farming practices and cattle management will be preferred.
3. Proficiency in data collection tools and software such as MS Office (Excel, Word, Presentation etc).

Duration:

The project should span a minimum of 3 months to allow for comprehensive data collection and analysis of cattle behaviour following various events. However, it can be extended up to a year to capture seasonal variations and long-term changes in behaviour patterns. Daily or multiple observations per day may be necessary to ensure accurate recording of behaviour across different events and timeframes.

Project 6: Vaccination Impact Study

Brief and Objective:

The objective of this project is to assess the impact of vaccination on milk yield in cattle, particularly focusing on variations resulting from deworming and yeast supplementation. The project aims to track changes in milk production before and after vaccination, both individually and in combination with dewormers and yeast supplements. Additionally, it seeks to evaluate the efficacy of different brands of supplements and dewormers in relation to specific vaccines and their effects on milk yield, fat content, and solid-not-fat (SNF) content.

Roles and Responsibilities:

1. **Research Analyst:** Conduct literature review and research to identify relevant supplements, dewormers, and vaccination protocols for the study.
2. **Field Technicians:** Administer vaccines, dewormers, and supplements as per the study protocol and collect milk samples for analysis.
3. **Data Analyst:** Analyze collected data to quantify changes in milk yield, fat content, and SNF content pre and post-vaccination, and evaluate the impact of dewormers and yeast supplements.
4. **Veterinary Specialist:** Provide expertise in vaccination protocols, deworming practices, and supplementation strategies to ensure the welfare of study animals.
5. **Project Coordinator:** Coordinate project activities, including sample collection, data analysis, and reporting, to ensure project objectives are achieved within the specified timeline.

Basic Competencies:

1. **Basic Dairy Knowledge:** Understanding of vaccination protocols, deworming practices, and supplementation strategies in dairy cattle management.
2. **Data Collection Skills:** Ability to accurately collect and analyze milk samples, including recording milk yield, fat content, and SNF content.
3. **Data Analysis Skills:** Proficiency in statistical analysis to identify trends and correlations in milk production data.
4. **Veterinary Expertise:** Knowledge of cattle health and welfare, including vaccination schedules, deworming protocols, and nutritional supplementation.
5. **Project Management Skills:** Capacity to manage project timelines, resources, and team members to ensure project goals are achieved.
6. **Communication Skills:** Effective communication skills to convey findings, interpretations, and recommendations to stakeholders.

Basic Requirements/Qualifications:

1. Pursuing bachelor's degree in agriculture, Veterinary Science, or related field (preferably 3rd or 4th Semester students) .
2. Prior Internships with dairy farming practices and cattle management will be preferred.

3. Proficiency in data collection tools and software such as MS Office (Excel, Word, Presentation etc).

Duration:

The project should span a minimum of 3 to 6 months, depending on the parameters being studied and the variety of supplements and dewormers being evaluated. This timeframe allows for comprehensive data collection and analysis of milk production changes pre and post-vaccination, as well as the impact of dewormers and yeast supplements.

Project 7: Feed Analysis

Brief and Objective:

The objective of this project is to assess the impact of feed on cattle health, productivity, growth, and reproduction. The project aims to evaluate the frequency, types, and amounts of feed given to cattle and their effects on various aspects such as milk yield, growth rates, and reproductive performance. It also seeks to develop optimized feed plans tailored to different stages of the cattle life cycle to improve overall health and productivity.

Roles and Responsibilities:

1. **Nutrition Specialist:** Develop feed plans based on cattle nutritional requirements and stage of life cycle, considering factors such as lactation stage and pregnancy stage.
2. **Field Observers:** Record data on the frequency, types, and amounts of feed given to cattle, as well as observations on cattle health, behavior, and productivity.
3. **Data Analyst:** Analyze collected data to identify correlations between feed types, amounts, and cattle health, productivity, and reproductive performance.
4. **Project Coordinator:** Coordinate project activities, including data collection, analysis, and feed plan development, to ensure project objectives are met within the specified timeline.

Basic Competencies:

1. **Nutritional Expertise:** Understanding of cattle nutritional requirements and the ability to develop optimized feed plans tailored to different stages of the cattle life cycle.
2. **Data Collection Skills:** Ability to accurately record data on feed types, amounts, and cattle health, behavior, and productivity.
3. **Data Analysis Skills:** Proficiency in statistical analysis to identify correlations between feed types, amounts, and cattle health, productivity, and reproductive performance.
4. **Project Management Skills:** Capacity to manage project timelines, resources, and team members to ensure project goals are achieved.
5. **Communication Skills:** Effective communication skills to convey findings, interpretations, and recommendations to stakeholders.

Basic Requirements/Qualifications:

1. Pursuing bachelor's degree in agriculture, Veterinary Science, or related field (preferably 3rd or 4th Semester students) .
2. Prior Internships with dairy farming practices and cattle management will be preferred.
3. Proficiency in data collection tools and software such as MS Office (Excel, Word, Presentation etc).

Duration:

The project should span a minimum of 3 months to a year to allow for comprehensive data collection and analysis of feed types and amounts and their impact on cattle health, productivity, growth, and reproduction. Changes in feed will be gradual, and the impact will be observed over time, necessitating a longer duration for the project. Additionally, the project can commence once the nutrition module is released on the platform in late 2024.

Project 8: Impact of Water on Cattle and Animal Husbandry Based on Industry Presence

Brief and Objective:

The objective of this project is to study how water availability and quality, influenced by the presence of various industries, affect cattle health and animal husbandry practices. The project aims to quantify the impact of industrial activities on water resources and their subsequent effects on cattle productivity, health, and overall farm economics.

Roles and Responsibilities:

1. **Environmental Analyst:** Assess the industrial activities in the area and their impact on water quality and availability.
2. **Field Observers:** Measure and record water intake and quality, and collect data on cattle health, productivity, and behavior.
3. **Data Analyst:** Analyze the collected data to identify correlations between industrial impact on water and cattle health and productivity.
4. **Veterinary Specialist:** Provide insights into how water quality affects cattle health and suggest possible interventions.
5. **Project Coordinator:** Ensure the smooth execution of the project, managing timelines, data collection, and team coordination.

Basic Competencies:

1. **Environmental Assessment Skills:** Understanding of industrial impact on water quality and availability.
2. **Data Collection Skills:** Ability to accurately measure and record water quality and cattle health data.
3. **Data Analysis Skills:** Proficiency in statistical analysis to identify correlations between industrial impact, water quality, and cattle health.
4. **Veterinary Knowledge**: Insights into how water quality affects cattle health and potential interventions.
5. **Project Management Skills:** Ability to manage project activities and ensure timely execution.
6. **Communication Skills:** Effective communication skills to convey findings and collaborate with team members.

Basic Requirements/Qualifications:

1. Bachelor's degree in environmental science, Veterinary Science, Animal Science, or related field.
2. Experience or familiarity with environmental impact assessment and animal husbandry practices.
3. Proficiency in data collection tools and software.
4. Knowledge of water quality assessment methods and equipment.
5. Strong analytical skills and attention to detail.
6. Effective communication skills, both verbal and written.

Duration:

The project should span a minimum of 3 months to observe significant changes and collect comprehensive data. It can be extended up to a year to account for seasonal variations in industrial activity and water availability, allowing for a thorough analysis of the impact on cattle health and animal husbandry practices.