

SOWMYA PALANICHAMY

Agricultural Engineer & Sustainability Specialist

📍 Milan, Italy | ✉ sowmyavivin22@gmail.com | 🎂 11 Dec 1997



Summary: Motivated M.Sc. graduate from Politecnico di Milano with a strong foundation in Agricultural Engineering, LCA, and process optimization. Combines analytical skills in resource management with practical experience in data analysis.

WORK EXPERIENCE

Scientific Collaborator <i>AgroTIE</i> <ul style="list-style-type: none">Completed specialized hydroponics training (Indo-Dutch CoE).Managed Tomato, Capsicum, Cucumber in semi-automated greenhouse.Expertise in fertigation, substrate, and disease management.	08/2024 -- 01/2025 Bengaluru, India
Client Services Advisor <i>Farmagain</i> <ul style="list-style-type: none">Collaborated with sales to offer product bundles to customers.Presented insights to senior management for strategic initiatives.	12/2020 -- 02/2021 Coimbatore, India
Farming Associate <i>Del Monte Foods</i> <ul style="list-style-type: none">Training in raw material sourcing and quality control.Managed raw material processing and coordinated delivery needs.	09/2019 -- 09/2020 Hosur, India

PUBLICATIONS

Implementation of Dutch Farming in South India <i>Master's Thesis, Politecnico di Milano</i>	Nov 2025
Developed a sustainable passive hydroponic system for tropical climates, demonstrating significant water savings and nutrient reduction.	

PROJECTS

High-Tech Entrepreneurship Business proposal for recycling plastic into 3D printing filaments.	01/2024
Materials for Agriculture Analyzed nutrient delivery methods and material efficiency for crops.	01/2024 -- 03/2024
Environmental Engineering (LCA) Analyzed Caviro Extra's LCAs and KPIs related to SDGs.	09/2023 -- 12/2023
Organic Cotton Supply Chain Mapped innovative solutions for Indian Cotton with Fairtrade.	09/2023 -- 12/2023
Control of Batch Chemical Process Simulation of process control using Arduino board and PLC.	02/2023 -- 04/2023
Seed Ball Making Machine Design and development of automated seed ball machinery.	03/2019 -- 10/2019

EDUCATION

M.Sc. Agricultural Eng. <i>Politecnico di Milano, Italy</i> 09/2022 -- 09/2025
B.E. Agriculture Eng. <i>Sri Shakthi Institute, India</i> 08/2016 -- 10/2020

SKILLS

Technical

- Life Cycle Assessment (LCA)
- Hydroponics & Precision Ag
- Irrigation Management
- Food Quality Management
- AutoCAD & SolidWorks
- Ansys Simulation
- Data Analysis

Languages

- English (Native)
- Italian (Professional)

CERTIFICATIONS

- Autodesk AutoCAD User**
(12/2017)
- Soil & Water Conservation**
ICAR (09/2018)
- Health and Safety**
Polimi (05/2023)
- Mechanized Farm Power**
Sri Shakthi Inst. (07/2017)
- Tractor Operation**
Govt of India (07/2019)

TRAININGS

- Internship Training**
Del Monte Foods (02/2020)
- In-Plant Training**
AAVIN (07/2019)
- Practical Aspects in Ag.**
National Seeds (09/2018)

PERSONAL DETAILS

Nationality: Indian

Location: Milan, Italy