

# Mohamed Gamal Eissa

## Agricultural Engineer | Irrigation & Smart Farming Specialist

✉ mohamedeissa195@gmail.com ☎ 01008435678 📍 Alexandria (Open to Relocation)

🌐 Mohamed Gamal Eissa 🛡 Completed – Ready for immediate start

### Profile

Detail-oriented Agricultural Engineer (Class of 2024) with a focus on Irrigation Network Design and Smart Farming technologies. Recently completed military service and ready for immediate full-time employment. Proven experience in site engineering, hydraulic calculations, and embedded systems for precision agriculture.

### Education

**Faculty of Agricultural, Alexandria University** 10/2020 – 07/2024  
Alexandria, Egypt

- **Graduation Project:** Smart Irrigation System for Hydroponics & Vertical Farming.
- **Role:** Embedded Systems Developer – Designed and coded automated nutrient/water delivery using Arduino and IoT sensors

### Experiences

**Agricultural Engineer | El Banna Group – Mega Farm 2** 04/2026 – Present

Manages agronomic operations across a 350-feddan citrus orchard (3-year-old navel orange trees) under drip irrigation, with direct responsibility for:

- Fertilization & foliar nutrition programs tailored to tree developmental stage
- Drip system maintenance — filters, emitters, pressure regulation, and lateral integrity
- Pest & disease spray programs — scheduling, supervision, and chemical protocol execution
- Field labor coordination across nutrition, spraying, and maintenance operations

**Internship with Hassan Allam Holding in Jinet Company At Alamein city** 07/2023 – 08/2023

**Site Irrigation Engineer (Intern) | Hassan Allam Holding (Jinet), El Alamein**

- Executed site installation based on professional shop drawings and technical specifications.
- Performed hydraulic calculations, including pipe flow rates and diameter sizing for optimal water distribution.
- Managed installation of various valve types and filtration units based on field requirements.
- Assessed plant water requirements to determine the most effective irrigation methods (Drip/Sprinkler)

## Skills

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### Technical Skills

- **Irrigation Design:** Network Layout, Hydraulic Calculations, Pipe Sizing, Hunter University Standards
- **Smart Farming:** Arduino Programming, IoT, Embedded Systems, Sensor Interfacing
- **Agronomy & Crop Management:** Fertigation Scheduling, Foliar Nutrition Programs, Citrus Orchard Management, Phenological Stage Monitoring, Nutrient Deficiency Diagnosis
- **Pest & Disease Management:** Spray Program Design, IPM Protocols, Chemical Dosage Calculation, Application Supervision
- **Operations Management:** Field Labor Supervision, Maintenance Planning, Agricultural Reporting
- **Software:** AutoCAD 2D, Microsoft Excel (Advanced), C Programming

### Training and Courses

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**Irrigation Installation Fundamentals** [↗](#), *Hunter University*

**AutoCAD 2D** [↗](#), *AASTMT*

**Irrigation Design** [↗](#), *Hunter University*

**Arduino Progaming Fundamentals** [↗](#), *Edraak*

**Introduction to IOT and Embedded Systems** [↗](#), *Coursera*

**The Arduino platform and C programming** [↗](#), *Coursera*

**Interfacing with the Arduino** [↗](#), *Coursera*

**Excel Skills for Business** [↗](#), *Coursera*

### Languages

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**Arabic**  
( Native )

**English**  
( B1 )