



# Issa Fares

Mechanical Engineer | Full-Stack Developer

## Profile

Full-stack software developer and mechanical engineer with expertise in ERP systems, industrial automation, AI-powered solutions, and mechanical design. Experienced in building scalable applications, deploying AI-driven systems, and leading projects that deliver measurable business impact.

Graduated with a BEng in Mechanical Engineering from the University of Sheffield (2021) and driven by a passion for creating practical, innovative solutions that bridge software and engineering.

## Work Experience

- Systems Implementation Engineer | M.C PVC LTD

JUN 2021 - Present

- Designed and deployed a scalable **ERP system** (Python/PostgreSQL) with manufacturing, inventory, and accounting modules, which increased operational efficiency by **18%** within six months, measured through improvements in JIT accuracy, employee productivity tracking, and production throughput.
  - Maintaining and upgrading the enterprise-wide ERP system, implementing closed-loop feedback mechanisms to refine workflows and enhance automation.
  - Reduced rejects by **35% in three months** by developing a **SCADA-based liquid monitoring system** for 36 industrial tanks, automating oil dispensing, enabling precise load tracking, and improving supplier-to-client traceability.
  - Implemented an AI object detection and tracking solution (**EfficientDet + Deep SORT**) achieving **99.6% accuracy** in classifying product variants on conveyor lines; reduced manual logging errors and automated inventory updates.
  - Co-designed a **vertical farming control platform** for leafy greens on a 50 m conveyor belt, integrating feeding automation, climate control, and crop scheduling to optimize yield.<
  - Performed an **FEA-based redesign** of a water bottle, reducing material weight by **16%** and improving compression resistance by **7%**, lowering production costs without sacrificing durability.
  - Deliver monthly technical reports to the CEO and C-suite, summarizing findings, observations, system statuses, and opportunities for technology-driven improvements.
  - Ensure alignment with industry benchmarks and best practices by tracking performance against sourced KPI data and continuously integrating improvement measures.
- Founder and CEO | African Wild LTD

MAR 2018 - JUL 2019

- Founded **AfricanWild**, a company producing and selling premium organic wild honey, by establishing partnerships with remote village foragers to source high-value honey believed to have superior health benefits.
  - Secured investment to scale operations and distribution, increasing monthly sales to approximately **200 kg** and driving consistent revenue growth.
  - Managed end-to-end supply chain, production, and sales processes, building a fully independent and sustainable business operation and expanding into new markets through export partnerships.
- Site Coordinator | HDFsons

OCT 2017 - FEB 2018

- Created a **parts tracking system** to log installation dates, failures, and costs, identifying the most reliable suppliers and reducing downtime.
  - Introduced **operator-machine rotation** with performance tracking, boosting overall efficiency by **12%** while keeping bonus costs under **0.5%**.
  - Identified bottlenecks in machinery rotations and maintenance scheduling; improved forecasting of equipment requirements for upcoming projects and tailored maintenance plans accordingly, reducing idle time and enhancing project delivery.
  - Analyzed **machine lifecycle data** to set cost-efficiency thresholds for replacements, reducing long-term maintenance.
- Intern / Managerial Assistant | Lela Agro

AUG 2014 - JUN 2015

- Joined as an intern and later supported managerial tasks in payroll and procurement.
  - Assisted in streamlining **supplier and inventory practices**, contributing to **\$60k** yearly cost savings.

## Education

- BEng Mechanical Engineering 2:1 Honors | University of Sheffield, U.K

AUG 2016 — JUN 2021

- Finite Element Analysis (FEA), CAD & Simulation, Manufacturing Process Design
  - Risk Assessment, Compliance & Engineering Standards, Sustainable Engineering & Lifecycle Analysis
  - Control Systems, Robotics

## Skills & Competences

- Programming & Web:

Python, C++, JavaScript (Node.js, React), Django, Flask, SQL, Microsoft Office
- CAD & Simulation:

Fusion 360, AutoCAD, SolidWorks, Blender, Ansys
- Engineering & Automation::

Control Systems, Structural Design, Simulations, Automation
- Cloud & DevOps::

AWS, CI/CD, Relational databases (PostgreSQL, MySQL)
- AI/ML:

Neural Networks, Computer Vision (object detection & tracking), n8n Integration

## PERSONAL DETAILS

- Email

faresissa22@gmail.com
- Phone number

+234 9030020100
- Nationality

Lebanese / Nigerian
- Date of Birth

22-DEC-1997

## LINKS

- Portfolio

Instagram

Linkedin

## SOFT SKILLS

- Problem-Solving

Quality Assurance Mindset

Analytical & Strategic Thinking

Cross-Functional Collaboration

Creativity

Interpersonal and Communication Skills

Data-Driven Decision Making

## LANGUAGES

- English (Native)

Arabic (Native)

Hausa (Fluent)

## ACHIEVEMENTS

- International Merit Scholarship

Global Engineering Challenge Award

Founded Saving Hope, a charity for underprivileged Nigerian children

## HOBBIES

- Reading

Video Gaming

Mixed Media Art

Squash

Camping

Equestrian Activities