# **Arsany Samuel**

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### Experience

Mar 2023 - Present

"DevOps Engineer / Software Developer" Noury AG. (Switzerland - Remote)

• DevOps Engineer (Jul 2023 - Present)

- o Developed CI/CD pipelines for multiple project types, ensuring fast and reliable deployments.
- $\circ~$  Containerized applications with Docker and managed deployments using Kubernetes and Helm.
- $\circ$  Architected and managed cloud infrastructure on GCP using IaC, with focus on security, access control, and cost optimization.
- Implemented observability and monitoring systems to ensure service health and performance.
- o Oversaw version control, integrations, and development process to enable scalable collaboration.
- o Improved developer experience by streamlining tools, workflows, and environment setup.

• Software Developer (Mar 2023 - Jun 2025)

- Contributed in Designing and implementing a robust backend application for the Noury's mobile app using Django Rest Framework, ensuring seamless and scalable API integrations.
- o Created and customized an ERP solution using Frappe/ERPNext, integrating and synchronizing data with multiple third-party sources to enhance operational efficiency.
- Provided mentorship to interns and team members, offering guidance on best practices and technical skills to foster professional growth and ensure successful project delivery.

"Technical/Site Mechatronics Engineer"

Specialist Company for Engineering Solutions. (Alexandria, Egypt)

Jun 2021 - Mar 2022

- Developed machine vision applications and user-friendly GUIs that integrates with SQL databases and
- other devices using network/serial communication.

   Designed mechanical and electronic circuits, including PCB layout.

"Technical Academic Team Member."

Vortex Robotics. (Academic ROV Team)

Nov 2018 - Aug 2020

- Participated in MATE ROV 2019 underwater robotics competition as an electrical/mechanical team member and ROV pilot.
- Participated in Underwater Robotics Challenges competition as a software team member.

### Skills

#### Software

Programming Languages: Python, Bash/Shell scripting, C, C++, Javascript, SQL.

DevOps & Cloud Tools: Docker, Kubernetes, Terraform, Helm, GitHub Actions, Bitbucket Pipelines, GCP, Linux

Development Frameworks: Django, DRF, Flask, Frappe/ERPNext, Qt, OpenCV

Markup Languages: Markdown, LATEX, HTML/CSS.

Other Tools: Git, EagleCAD, KiCAD, Circuit design, Microcontrollers, SolidWorks.

# Projects

Noury Consumer App

- Designed and developed a scalable backend REST API using Django Rest Framework to support Noury's consumer mobile application.
- Optimized CI/CD pipelines and automated deployment processes using Docker for containerization and Kubernetes for orchestration, enhancing release efficiency, scalability, and minimizing downtime.
- Implemented monitoring and logging strategies to maintain API performance and reliability.

Noury Resource Planning

- Engineered a customized ERP system using Frappe/ERPNext, designed to streamline internal operations and enhance business efficiency.
- Implemented advanced data synchronization techniques to integrate multiple third-party data sources and APIs, ensuring real-time updates and accurate information across systems.
- Customized ERP modules and workflows to meet specific business needs, including automated reporting and process automation to improve operational efficiency.
- Optimized system performance and scalability, adapting the ERP solution to support growing business demands and evolving requirements.

IRRIGATION CONTROLLER

- Engineered a microprocessor-based system with advanced algorithms, integrating data from wireless weather stations and sensors to optimize watering needs.
- Developed a customizable user interface, including kiosk, mobile app, and web portal, and implemented both wired and wireless communication methods.
- Integrated a computer vision application to monitor field images, track irrigation processes, and maintain plant health, improving overall system efficiency.

ROBOTIC ARM

- Engineered and manufactured a robotic arm with 6 degrees of freedom for automated agricultural product collection, equipped with an pneumatic powered manipulator and integrated system components to enhance efficiency in harvesting operations.
- Implemented machine learning and computer vision to accurately identify and differentiate fruits and drive the arm to collect them.

VORTEX ROV

- Contributed in the design and fabrication of a remotely operated underwater vehicle featuring two manipulators and a quad camera vision system.
- Programmed the ROV for advanced control and operation for the MATE ROV Competition 2019 and Underwater Sea Challenges 2020.
- Integrated the vehicle's components to ensure effective performance in harsh underwater environments.

Backwash Controller

- Created a microcontroller-based system to automate the backwash process of drip irrigation system filters.
- Designed the unit for operation based on user-defined timing, differential pressure sensing, or a hybrid program.

## Training and Certifications

June 2025 Google

"Associate Cloud Engineer"

credly.com/badges/515940bf-b2cd-4879-9306-2c6c4f411098/public\_url

**April** 2023

"Agile Explorer"

credly.com/badges/7b1b3f1f-edc3-4ffd-9328-7c55b4078b57/public\_url

March 2023

"Thinking and Creating with Code"

EPFL Extension School

learn.extensionschool.ch/verify/VqOzbOAyD9pl

September 2022

"CS50x"

Harvard University

certificates.cs50.io/fe015e39-3d8e-48ad-a13b-4177ec41e108.pdf

July 2021

"CSWE: Certified SolidWorks Expert - Mechanical Design." Dassault Systèmes C-6NMDPAQ9UE

### Education

"B.S.E. in Agricultural Engineering" Faculty of Agriculture, Alexandria University