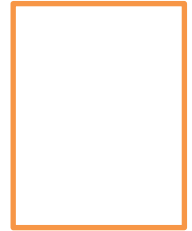


Curriculum Vitae (CV)

Name

SARA GAMAL SEADBY



Personal Information:

Academic Rank:

Department: Mechatronics Engineering

Specialization: Robotics & AI Researcher

Position: Assistant Professor

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Research Gate:

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## Education:

Degree	Discipline	Institution	Year
Ph.D.	<i>Mechanical Engineering</i>	<b><i>Shoubra-Engineering, Benha University</i></b>	2024
M.Sc.	<i>Mechanical Engineering</i>	<b><i>Shoubra-Engineering, Benha University</i></b>	2017
B.Sc.	<i>Mechanical Engineering</i>	HTI	2010

## Academic Experience:

**Institution:** hti

**Rank:** Lecturer

**Dates:** (2024)

**Institution:** hti

**Rank:** Lecturer Assistant

**Dates:** (2016 – 2023)

**Institution:** hti

**Rank:** Researcher

**Dates:** (2011 – 2016)

## Research interests:

- **Programming:** Python (TensorFlow, PyTorch), C++, MATLAB, LabVIEW
- **AI/ML:** Deep Learning, Computer Vision (OpenCV), Reinforcement Learning
- **Control Systems:** PLCs (Siemens S7-300), Microcontrollers (PIC, Arduino)
- **CAD/Simulation:** SolidWorks, ANSYS
- **Hardware:** MYRIO, Sensor Integration, Robotics Actuators

## Publications:

1. **Khalil, T. A.,** Habib, S., **Seadby, S. G.,** & Maged, S. A. (2024). *A structural optimization analysis of cable-driven soft manipulator. International Journal of Advanced Robotic Systems, \*21\*(2).* [DOI](#)
2. **Seadby, S. G.,** et al. (2017). *Lane Tracking and Obstacle Avoidance for Autonomous Vehicles Using Embedded Machine Vision System. Faculty of Engineering-Matara Journal, \*153\*.*
3. Habib, S., Khalil, T. A., **Seadby, S. G.,** & Maged, S. A. (2024). *Analytical Modeling of Cable-Driven Soft Manipulators with Constant Curvature: A Simulation Approach. Engineering Research Journal (Shoubra), \*53\*(3), 31-36.*

## Certifications or Professional Registrations:

- **Certified LabVIEW Associate Developer** (2015)
- **LabVIEW Core 1 & 2 Trainer** (2014)
- **PIC Microcontroller Programming** (Electronics Art & Control Center, 2008)
- **Siemens PLC (S7-300) Training** (Technology Competency Center, 2008)

## Teaching Experience:

- Automatic Control Systems
- Digital Circuits & Electronics
- Artificial Intelligence in Mechatronics