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**Proposal for graduation project (2022-2023)**

**Advanced Automated System for Industry 4.0 Applications**

**Students**

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**Supervisor**

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***Prof. Hamdy Ashour***

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**Abstract:**

Automated systems in industry 4.0 has been widely introduced to monitor, control optimize production processes, using smart devices such as **VSD, PLC and HMI**. The future of **industry 4.0**, or smart industries, requires the digitalization and interconnection of its processes through the use of recent technologies such as **IoT** with **efficient energy** utilization. The **TIA** portal platform by **Siemens** can be utilized for such objectives.

**The project will cover the following activities:**

- ✓ Understanding recent industrial automation technologies for industry 4.0 revolution
- ✓ PLC versus SCADA Systems
- ✓ Design suggestion of automated system for typical industrial application
- ✓ Simulation analysis
- ✓ Experimental validation
- ✓ Conclusions and recommendation s

