

# HAITHEM CHAOUCH

Ph.D. - Assistant Professor / Senior Embedded System Engineer (IoT)

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Born 28/06/1982

## OBJECTIVE

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To start a new career within a High-Tech Multinational University.

## WORK EXPERIENCES

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- Project Manager (2022-until now):
  - STMicroelectronics:
    - ✓ Produce long term plan based on available resources.
    - ✓ Define the content of each release.
    - ✓ Define the effort estimations and major risks for new SoC.
    - ✓ Participate to regular SoC program meetings.
    - ✓ Contribute to SwDev Tools Bandwidth analysis.
    - ✓ Provide quality metrics (PTV/PEV).
    - ✓ Participate and Lead various CCBs.
    - ✓ Participate to internal audits.
    - ✓ Conduct RCA when required.
    - ✓ Maintain the A&T dashboard inputs.
    - ✓ Handle the evaluation of priority calls onto running projects.
- Technologist instructor (2020-2022)
  - Higher Institute of Technological Studies of MAHDIA (Tunisia):
    - ✓ Microcontrollers.
    - ✓ DSP Circuit.
    - ✓ IoT.
    - ✓ Embedded System.
- Senior Software Design engineer (2018- 2020):
  - SUNNY/ATMACA Electronics (Turkey/Istanbul)
    - ✓ Leading Mobile health projects: Chronical diseases tracing gateway device (Diabetes, blood pressure, cardiology, asthma, KOAH and etc.).
    - ✓ Working on PCR device (Amplifies and detects DNA/COVID-19 detection) project.
    - ✓ Working on different version of Android AOSP/Linux operating system.
    - ✓ Android application developer in BMS firmware.
- Team leader (2017-2018):
  - Alto Holding A.S (Turkey/Istanbul):
    - ✓ Leading software development team for smart grid technologies project.
- Laboratory Researcher (2015-2017):
  - IoTRLab (Turkey/Sakarya):
    - ✓ Working on building energy management system design by using software-defined networking and internet of things project.
- Technologist instructor (2012-2015):
  - Higher Institute of Technological Studies:
    - ✓ Real time System.
    - ✓ Robotic System.
    - ✓ Supervision process.
    - ✓ Embedded System.
- Functional validation/testing engineer of ST electronic products (2007–2012):
  - STMicroelectronics (Tunisia/Tunis):
    - ✓ Worked on: STi7111, STi7106, STi5206, STi7108, Orly (MPE41).
    - ✓ Software embedded development in C/C++.
    - ✓ Design software solutions and architecture for consumer SoCs based products (DTV, STB and IPTV).
    - ✓ Display IP (Intellectual property) ownership.

## EDUCATION

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### ■ Higher Education:

- PhD degree (5 years) September 2016- 2021:  
Sakarya University (**Turkey/Sakarya**)  
Department of Electrical and Electronics Engineering.  
*Discipline:* Embedded Systems/ Internet of Things (IoT).
- Master degree (2 years) September 2005-Jun 2007:  
National diploma of Electronic Master in the National  
Engineering School of Sfax (ENIS).  
*Discipline:* Embedded Systems (FPGA-DSP).
- Electrical Engineering Degree (3 years) September 2003–June 2006:  
National diploma of Electrical engineer in **Electronics and New  
Technologies (ENT)** from (ENIS)

## PUBLICATIONS

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### ► Refereed journal publications:

- [1] H. Chaouch et al., "Energy management of HVAC systems in smart buildings by using fuzzy logic and M2M communication," in International Journal of Journal of Building Engineering (ELSEVIER), Vol. 44, April 2021.
- [2] I. Werda and H. Chaouch et al., "Optimal DSP-Based Integer Motion Estimation Implementation For H.264/AVC Baseline Encoder," in The International of Arab Journal of Information Technology, Vol.7, No. 1, January 2010.
- [3] S. Dhahri, A. Zitouni, H. Chaouch et al., "Adaptive Motion Estimator Based on Variable Block Size Scheme" in International Journal of Electronics and Communication Engineering Vol:3, No:2, 2009 .
- [4] H. Chaouch et al., "Fast block size selection algorithm for inter frame coding in H.264/AVC on TMS320C6416 DSP," in International Journal of Computer Science and Network Security, Vol. 7, No. 5, May 2007.

### ► Refereed conference publications:

- [1] H. Chaouch et al., "Energy Management in Smart Buildings by Using M2M Communication" in International Istanbul Smart Grids and Cities, 2019 ICSG.
- [2] F. Sakaci, E. Cetiner, H. Chaouch et al., "Smart Office for Managing Energy of Lighting Control System" in International Istanbul Smart Grids and Cities, 2018 ICSG.
- [3] H. Chaouch et al., "Modeling and Simulation of Appliances Scheduling in the Smart Home for Managing Energy," in CISTEM 2014 International conference on electrical sciences and technologies in maghreb, 2014.
- [4] H. Chaouch et al., "Low power architecture of motion estimation and efficient intra prediction based on Hardware design for H.264," in IEEE international conférence on Design & Technology of Integrated Systems in Nanoscale Era ISBN 978-1-4244-6338-1./ DTIS 2010.

## LANGUAGES

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Arabic, French, English and Turkish (Read, written and spoken).

## HOBBIES

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- **Sport:** Football and swimming.
- **General:** Internet, new technologies and History.