

Mohamed A. Abdelhady

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Amsterdam, NL



EDUCATION

UNIVERSITY OF TWENTE

MSc ROBOTICS &
MECHATRONICS

September 2017

Cum Laude. CGPA: 8.5 / 10.0

GERMAN UNIVERSITY IN CAIRO

BSc IN MECHATRONICS

July 2014

Cum Laude. CGPA: 1.4 / 1.0

TECHNICAL UNIVERSITY IN MUNICH

BACHELOR THESIS

July 2013

"Probabilistic Sensor Data
Fusion"

GPA: 1.1 / 1.0

PROJECTS

- Pedestrian tracking using FCNs (ongoing)
- Python packages for robotics algorithms and autonomous navigation (contributor)
- Visual navigation using monocular camera
- Bond graph modeling of a two-staged gimbaled thrust rocket
- Haptic Teleoperation of 1-DOF arm

SKILLS

LANGUAGES & FRAME- WORKS

- Python • C++ • Matlab • Bash
- ROS • OpenCV • Tensorflow • MRPT • gRPC • NetworkX • Git
- Keras

EXPERIENCE

FOURTHLINE | COMPUTER VISION & MACHINE LEARNING ENGINEER

August 2019 - Current | Amsterdam, NL

- Develop deep learning models for documents authentication.
- Architecting new machine learning pipelines.
- Research Bayesian inference approximation in deep learning tasks.

ASML | SOFTWARE & ALGORITHM DEVELOPER

June 2018 - July 2019 | Eindhoven, NL

- Development model-driven software components and algorithms for new machine module.
- Implemented data visualization pipelines to verify new motion protocols.
- Developed a crawling tool to inspect illegal interfaces within team boundaries that reduced the development time..

MAGAZINO GMBH | ROBOTICS SOFTWARE ENGINEER

Sep 2017 - May 2018 | Munich, DE

- Worked in a team of six to deploy autonomous robots fleet at 2 intra-logistics warehouses in Munich and Berlin.
- Contribute to multi-robot navigation and planning using topological graphs.
- Created a robot-in-the-loop testing pipeline to improve software release process.

GERMAN UNIVERSITY IN CAIRO | RESEARCHER & TEACHING ASSISTANT

August 2014 - July 2015 | Cairo, EG

- Developed multi-robot planning and task allocation algorithms for heterogeneous Khepera-III mobile robots.
- Developed Vision tracking software for medical micro-particles.
- Teaching and management of 6 undergraduate courses.

PUBLICATIONS

LEARNING A RECURRENT NEURAL NETWORK FOR STATE ESTIMATION USING FILTER DATA

IEEE Intelligent Vehicles 2019

Ahmed M. Hammam, Mohamed A. Abdelhady, Omar Shehata

DEMO DESIGN: THE VIRO AGILE EYE

DSPE Mikroniek magazine, Volume 58, Issue 1

Louis Stijn, Mohamed A. Abdelhady, Samer Abdelmoeti

MULTI-ROBOT TASK ALLOCATION FOR SEARCH & RESCUE MISSIONS

Nov 2014 | Advanced Control & Diagnostics Workshop, Berlin, DE

Ahmed Hussein, Mohamed A. Abdelhady, M. Bakr, Omar Shehata and Alaa Khamis