# AYBERK ÖZGÜR

EPFL-CHILI RLC D1 740 (Rolex Learning Center), Station 20 CH-1015 Lausanne, Switzerland

+41 21 69 32705 ayberk.ozgur@epfl.ch

# RESEARCH INTERESTS

My goal is to build robots that can function in real world scenarios among humans rather than structured laboratory/industrial settings. My vision is to bring together methodologies from multiple disciplines, and fields such as mobile robotics, manipulators, human-robot interaction, computer vision, tangible interfaces and haptics are interesting to me, among others. I'm currently working towards my Ph.D. in the Cellulo project that is concerned with designing, building and exploring paper-assisted mobile haptic swarm robots for primary education.

### **EDUCATION**

#### ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE, SWITZERLAND

CHILI Laboratory, Cellulo project

Computer, Communication and Information Sciences Ph.D. Candidate

2014 - Present

2013 - Present

#### BOĞAZİÇİ UNIVERSITY, ISTANBUL, TURKEY

Computer Engineering B.Sc. 2009 - 2013

• GPA: 3.91

Participated in Robocup SPL along with Cerberus in Mexico City
 Conducted robotics research in AILAB
 Membership in COMPEC (Boğaziçi University IT Club)
 2011 - 2013
 2009 - 2010

#### LYCEE DE GALATASARAY, ISTANBUL, TURKEY

High School Degree 2004 - 2009

#### AWARDS AND HONORS

• Best Human-Robot Interaction Design Paper award in the 2017 HRI Conference March 2017

• Best Paper award in the 23rd RO-MAN International Symposium August 2014

• Completed Bachelor studies with high honors, ranked 1<sup>st</sup> out of 56 graduates

June 2013

B.Sc. thesis "Tabletop Manipulation in Clutter with Affordable 5-DOF Manipulator" received Best
Departmental Undergraduate Thesis award
 June 2013

• Medals in Le Concours du Kangourou des Mathématiques 2008, 2009

Project "Handwritten Digit Recognition with Neural Networks" exhibited in TUBITAK (Scientific and Technological Research Council of Turkey) Research Project Contest
 April 2008

• Bronze Medals in TUBITAK National Olympiad in Informatics 2006, 2007

# **PUBLICATIONS**

- A. Özgür, S. Lemaignan, W. Johal, M. Beltran, M. Briod, L. Pereyre, F. Mondada and P. Dillenbourg, "Cellulo: Versatile Handheld Robots for Education", In 2017 ACM/IEEE International Conference on Human-Robot Interaction (HRI), Vienna. Best Human-Robot Interaction Design Paper award.

  March 2017
- A. Özgür, W. Johal, F. Mondada and P. Dillenbourg, "Windfield: Learning Wind Meteorology with Handheld Haptic Robots", In 2017 ACM/IEEE International Conference on Human-Robot Interaction (HRI), Vienna.

  March 2017
- A. Özgür, W. Johal and P. Dillenbourg, "Permanent Magnet-Assisted Omnidirectional Ball Drive", In 2016 IEEE International Conference on Intelligent Robots and Systems (IROS), Daejeon.

October 2016

- L. Hostettler, A. Özgür, S. Lemaignan, P. Dillenbourg and F. Mondada, "Real-Time High-Accuracy 2D Localization with Structured Patterns", In 2016 IEEE International Conference on Robotics and Automation (ICRA), Stockholm.

  May 2016
- A. Özgür, S. Bonardi, M. Vespignani, R. Möckel and A. J. Ijspeert, "Natural User Interface for Roombots", In RO-MAN 2014, The 23rd IEEE International Symposium on Robot and Human Interactive Communication, Edinburgh. *Best Paper award.*August 2014
- A. Özgür and H. L. Akın, "Planning for Tabletop Clutter Using Affordable 5-DOF Manipulator", In Robotics: Science and Systems (RSS) Workshop on Robots in Clutter: Preparing robots for the real world, Berlin.

  June 2013
- A. Özgür and H. L. Akın, "Tabletop Manipulation in Clutter with Affordable 5-DOF Manipulator",
   B.Sc. thesis in Computer Engineering, Boğaziçi University, Istanbul.

  June 2013

# ADDITIONAL SKILLS

- Speak advanced level English and French
- Proficient in C, C++, QML, Java and LaTeX
- Skilled in ROS
- Skilled in QtQuick application development
- Skilled in Android application development
- Skilled Linux system administrator and web administrator
- Skilled in managing and maintaining computer hardware
- Skilled in embedded systems design
- Skilled in Altium Designer
- Skilled in Solidworks
- Moderate in Matlab, Perl, Python, HTML, CSS, Javascript, Verilog, VHDL

#### PERSONAL INTERESTS

- Electronics design
- Mechanical design
- Robot design
- Software development