Mihai BÂCE

PERSONAL DATA

PLACE AND DATE OF BIRTH:	Romania | 14 June 1989
ADDRESS:	Universitätstrasse 6, 8092 Zürich, Switzerland
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EDUCATION

2014 - Present
Research Assistant / PhD Student at ETH Zürich, Switzerland
PhD Student in the Distributed Systems Group, Institute for Pervasive Computing. My research is in the area of Human-Computer Interaction (HCI). I am trying to develop systems that can facilitate natural interaction between humans and computers. More specifically, I am interested in natural interaction using our hands and integrating eye-gaze as an additional input modality. Furthermore, my work is focused around wearable resource constrained devices.

Jun 2016
UBI Summer School 2016 (UBISS), Oulu, Finland
Workshop B: Eyework: Designing Interactions with Eye Movements

Sept 2015
Machine Learning Summer School (MLSS), Kyoto, Japan
The summer school presented topics which are at the core of modern Machine Learning, from fundamentals to state-of-the-art practice.

2012 - 2014
MSc in Computer Science at Ecole Polytechnique Federale de Lausanne (EPFL), Switzerland
MSc Thesis 6.0 out of 6.0. Graduate Coursework: Advanced Algorithms, Distributed Algorithms, Intelligent Agents, Image Processing, Advanced Databases (Big Data)

2008 - 2012
BSc in Computer Science at The Technical University of Cluj-Napoca, Romania
BSc Thesis 10 out of 10. Undergraduate Coursework: Computer Architecture, Algorithms, Software Design, Artificial Intelligence, Image Processing, Pattern Recognition.

EMPLOYMENT

Feb 2014 - Aug 2014
Research Intern at ABB Corporate Research Center, Switzerland
Indoor Localization on Smartphones. Try to accurately locate a smart mobile device indoors where GPS cannot be used reliably. Propose a system that can use crowd sourced Wi-Fi data for localization. Implement a prototype on a smartphone running Android OS

Aug 2013 - Feb 2014
SDE Intern at Microsoft, Ireland
Software Development Engineer Intern at the Microsoft European Development Center (EDC) in Ireland. Part of the Office Marketplace Experience (OMEX) team. Design and implement new features for the Office Marketplace platform.

Jul 2010 - Aug 2012
Research Assistant at The Technical University of Cluj-Napoca, Romania
Member of the Image Processing and Pattern Recognition Group (IPPRG) lead by Professor Sergiu Nedeveschi. Proposed a Cooperative Advanced Driving Assistance System using Smart Mobile Devices. Use wireless communication to exchange data between the mobile device and the infrastructure elements. Proposed a solution and an implementation for an Extended Digital Map (EDM) that holds more information than a regular navigation map (e.g. lane information, painted arrows, road curvature etc.).

PUBLICATIONS

2017
M. Bace, G. Sörös, S. Staal, G. Corbellini, "HandshakAR: Wearable Augmented Reality System for Effortless Information Sharing", Proc. Augmented Human 2017 (AH 2017), Mountain View, CA, USA

2016	**M. Bace**, T. Leppänen, A. Ramirez Gomez, D. Gil de Gomez, "ubiGaze: Ubiquitous Augmented Reality Messaging Using Gaze Gestures", Proc. ACM SIGGRAPH ASIA 2016 Mobile Graphics and Interactive Applications (MGIA 2016), Macao
2015	**M. Bace**, Y. A. Pignolet, "Lightweight Indoor Localization System", Proc. of the 8th IFIP Wireless and Mobile Networking Conference (WMNC 2015). Munich, Germany
2011	V. Popescu, **M. Bace**, S. Nedevschi, "Improved Localization and Enhanced Environment Representation by Sensorial and Digital Map Data Fusion in Intersections", Proc. of Workshop on Intelligent Transportation 2011, Hamburg, Germany
2011	V. Popescu, **M. Bace**, S. Nedevschi, "Lane Identification and Ego-Vehicle Accurate Global Positioning in Intersection", Proc. of IEEE Intelligent Vehicle Symposium 2011, Baden-Baden, Germany
2011	V. Popescu, **M. Bace**, S. Nedevschi, "Probabilistic Approach for Automated Reasoning for Lane Identification in Intelligent Vehicles", Proc. of IEEE International Symposium on Symbolic and Numeric Algorithms for Scientific Computing 2011, Timisoara, Romania

AWARDS

2016	Distinguished Project Award, "ubiGaze: Ubiquitous Augmented Reality Messaging Using Gaze Gestures" UBISS 2016, Oulu, Finland
2015	Best Paper Award, Wireless and Mobile Networking Conference, Munich, Germany, Title: "Lightweight Indoor Localization System"
2013	3rd place NASA Space Apps Challenge, Reach for the Stars category
2011 – 2012	Research Scholarship from the Technical University of Cluj-Napoca
2009 – 2012	Merit scholarship from the Technical University of Cluj-Napoca
2008	1st prize American Computer Science League, Baltimore, Maryland, USA
2007	1st prize American Computer Science League, Houston, Texas, USA

LANGUAGES

ROMANIAN:	Mothertongue
ENGLISH:	Fluent (C1)
	2012 TOEFL iBT 110 out of 120
	2007 Cambridge Certificate in Advanced English (CAE)
GERMAN:	Intermediate (B1)
FRENCH:	Advanced beginner (A2)

INTERESTS AND ACTIVITIES

Technology, Programming and software development, Machine Learning
Skiing and Snowboarding, Tennis, Hiking, Travelling