CONTACT INFORMATION	Afrooz Ebadat, PhD Student, KTH-Royal Institute of Technology, Automatic Control Lab., Osquldas väg 10, 100 44 Stockholm, SWEDEN.	Cell: +46 (0)765 629 086 E-mail: ebadat@ee.kth.se, afrooz.ebadat@gmail.com
RESEARCH INTEREST	 System identification for (Model Predictive) control Building Automation Non-parametric system identification Numerical optimizations Fuzzy systems 	
SUMMARY OF EDUCATIONAL QUALIFICATION	Royal Institute of Technology, Stockholm, Sweden Ph.D., Automatic Control, May 2012 - Present Research topics: "MPC oriented experiment design for system identification" "Buildings occupancy estimation"	
	 Shiraz University , Shiraz, Iran M. Sc., in Control Engineering, September 2008 - May 2011. School of electrical and computer engineering, Shiraz university, Shiraz, Iran. Thesis Title: "Application of Control methods in Optimal Oil Well Placement" Supervisor: Dr. P. Karimaghaee (Associate Professor) Reviewer: Prof. A.A. Safavi Course work average: 19.12/20 Thesis Grade out of 20: 19.8 	
	 Shiraz University , Shiraz, Iran B. Sc., in Electrical Engineering (Control), Se of electrical and computer engineering, Shiraz Project Title: "Simulation of Educational En Supervisor: Prof. A.A. Safavi Overall GPA: 17.45/20 	eptember 2004- September 2008. School university, Shiraz, Iran. vironment for Industrial Control"
ACADEMIC PROJECTS	 Current Projects: ✓ Occupancy estimation of buildings using and system identification techniques ✓ Experiment design for open loop system if ✓ MPC oriented experiment design for system 	g environmental signals de-convolution identification em identification
	 Previous Projects: ✓ Particle Filters for System Identification of Simulation of Arm Robot with 5 Degr Toolbox, Matlab ✓ Multivariable Systems Control: Design using Hankel singular values ✓ Adaptive Control: Transient-Perform Adaptive Controlers ✓ System Identification: Improvement identification employing least square and ✓ Fuzzy Control: Applying Orthogonal La Neural Network 	of State-Space Models ree of Freedom Using Virtual Reality gn LOQ regulator for MIMO systems ance improvement with a class of of Fuzzy Hyperbolic Modeling and Levenberg Marquardt method. east Square Methods to Dynamic Fuzzy

- PUBLICATIONS
 [J3] A. Ebadat, P. Karimaghaee and H. Mahdiyar, 'Application of Gradient-Based Control Methods in Efficient Oil well Placement Through Dynamic Fuzzy Neural Network Modeling', Springer, CCIS 194, pp. 616–630, 2011 also DEIS2011, London, 22-24 July, 2011
 - 2. [J2] **Afrooz Ebadat**, Navid Noroozi, Ali Akbar Safavi, Seyyed Hossein Mousavi, 'New fuzzy wavelet network for modeling and control: The modeling approach', *Journal of Communications in Nonlinear Science and Numerical Simulation*, Elsevier, vol6, issue8, 2011.
 - 3. [J1] Seyyed Hossein Mousavi, Navid Noroozi, Ali Akbar Safavi, Afrooz Ebadat, 'Modeling and control of nonlinear systems using novel fuzzy wavelet networks: The output adaptive control approach' *Journal of Communications in Nonlinear Science and Numerical Simulation*, Elsevier, 2011
 - [C9] A. Ebadat, M. Annergren, C. A. Larsson, C. R. Rojas, B. Wahlberg, H. Hjalmarsson, M. Molander, J. Sjöberg, "Application Set Approximation in Optimal Input Design for Model Predictive Control", submitted to 13th European Control Conference (ECC), 24-27 June, Frnace.
 - [C8] Afrooz Ebadat, Giulio Bottegal, Damiano Varagnolo, Bo Wahlberg, Karl H. Johansson, "Estimation of building occupancy levels through environmental signals deconvolution", 5th ACM Workshop On Embedded Systems For Energy-Efficient Buildings, 13-14 November, 2013, Rome, Italy
 - 6. [C7] **Afrooz Ebadat**, B. Wahlberg , H. Hjalmarsson , C. R. Rojas, P. Hägg , C. A. Larsson "Applications Oriented Input Design in Time-Domain Through Cyclic Methods", submitted to the 19th IFAC World Congress, (IFAC WC 2014).
 - [C8] Per Hägg, Christian A. Larsson, Afrooz Ebadat, Bo Wahlberg, Håkan Hjalmarsson, "Input Signal Generation for Constrained Multiple-Input Multiple-Output Systems", submitted to the 19th IFAC World Congress, (IFAC WC 2014).
 - [C5] A. Ebadat, P. Karimaghaee, "Genetic Algorithm Assisted Fuzzy Iterative Learning Optimizer for Automatic Optimization of Oil Well Placement under Production Constraints", IFAC workshop on Control Applications of Optimization, Volume 15, Part 1, 2012, Rimini, Italy.
 - [C4] A. Ebadat, P. Karimaghaee and H. Mahdiyar, 'Application of Gradient-Based Control Methods in Efficient Oil well Placement Through Dynamic Fuzzy Neural Network Modeling', Springer, CCIS 194, pp. 616–630, 2011 also DEIS2011, London, 22-24 July, 2011
 - [C3] A. Ebadat, P. Karimaghaee, M. Jesmani, 'Optimization-Based Fuzzy Iterative Learning Control', *Iranian Conference on Electrical Engineering*, 2011, Tehran, Iran
 - 11. [C2] M. Jesmani, F. Shabani, P. Karimaghaee, A. Ebadat, 'Singular Value Decomposition Assisted Ensemble Kalman Filter for History Matching Problem, *Iranian Conference on Electrical Engineering*, 2011, Tehran, Iran
 - [C1] A. Ebadat, N. Noroozi, A.A. Safavi, and S. H. Mousavi, 'Modeling and Control of Nonlinear Systems Using Novel Fuzzy Wavelet Networks: The Modeling Approach', 49th IEEE Conference on Decision and Control, December 15-17, 2010, Atlanta, GA, USA

 WORK
 July 2010 – April 2012
 Saba Etesalat (Manufacturer of Fiber Optic telecommunication appliances), Shiraz, Iran, Position: Sale Manager
 September 2008 – September 2009
 Pars Hasas (Industrial automation), Shiraz, Iran, Position: technician