

Ahmad Golchin

60 Calumet st., Boston, MA 02120 | (617) 306-8398 | golchin@bu.edu

Education

- **September 2017 - Now**
Ph.D. in Computer Science
[Boston University](#), USA
Advisor: Richard West
- **September 2014 – July 2017**
M.Sc. in Computer Science and Engineering
[Politecnico Di Milano](#), Italy
GPA: 110 / 110
Thesis: Tickless Control Scheduling
Advisors: William Fornaciari, Federico Terraneo
- **September 2008 – July 2012**
B.Sc. in Computer Engineering
[Sheikhbahaee University](#), Iran
GPA: 17.95 / 20
Thesis: Wing+, A Web Programming Language and Framework
Advisor: Ahmad Baraani

Professional Interests

- **Operating Systems**
- **Real-time Systems**
- **Embedded Systems**

Background Experience

Internship at K4TECH Srl, Milan, Italy (As a part of M.Sc. Program at Politecnico Di Milano)

- Real-time system developer (December 2016 – June 2017):
 - Design and Implementation of real-time Face Detection algorithm based on Scale-Space Feature Extraction and SVM based on C++, Qt for Embedded Systems and High-End Computer Systems.
 - Design and Implementation of Face/Gender Recognition algorithms based on Convolutional Neural Networks and SVM in Python, C++, Qt and Tensorflow for Embedded Systems and High-End Computers Systems.

At HiPEAC Lab, Politecnico Di Milano, Italy

- Developer at [MIOSIX operating system](#) (September 2015 – April 2017):
 - Development of Aperiodic context switch interface for the kernel and implementation of drivers for various ARM-based SoC boards such as STM32v407 and EFM32GG.
 - Optimization, test and maintenance of kernel scheduling scheme
- Supervisor: Dr. Federico Terraneo

At Tooska Espadan Co., Isfahan Science and Technology Town, Iran

- Head of CortexOS development team (May 2012 – April 2014):
 - Designed and implemented a lightweight POSIX compliant operating system for i386, Xilinx Microblaze and ARM Cortex A7 processors from scratch primarily to be used in embedded systems requiring tasks with deadlines (Discontinued Project).
- Advisor: Prof. Mohammad Javad Omid

At Sheikhabaee University, Iran

- Design and Implementation of Wing+ project which is a new server-side programming language along with a programming framework, compiler and a MP/MT web server. The focus of Wing+ is on runtime performance, low resource usage and source code safety.
- Supervisor: Prof: Ahmad Baraani

At e-Content Lab, Isfahan University of Technology, Iran

- Researcher and developer of Smart-Reader Project (July 2006 – September 2008):
 - Smart-Reader is an OCR application capable of recognizing complex-script texts from images and the main algorithm of the application is based on morphological operations and artificial neural networks classification.
- Supervisor: Prof. Mohammad Javad Omid

Publications

- Golchin, A., & Baraani, A. (2011, November). Wing+ Web-Application Development Framework. *International Journal of Distributed and Parallel Systems (IJDPS)*, 2(6), 179-190.

Main Skills & Abilities

- **C/C++ Programming** – Since 2000
- **Java Programming** (J2SE and J2EE) – Since 2006
- **SQL** (MSSQL, MySQL and SQLite) – Since 2006
- **Assembly Programming** (x86, ARM, Microblaze) – Since 2009
- **Operating Systems** – Since 2012 – please refer to the appendix one
- **Software Engineering** (Analysis and Design) – 2 Years full-time

References

- 1) [William Fornaciari](#)
 - Associate Professor at Dipartimento di Elettronica e Informazione, Politecnico Di Milano
 - Email: william.fornaciari@polimi.it
- 2) [Federico Terraneo](#)
 - Post Doc fellow at Dipartimento di Elettronica e Informazione, Politecnico Di Milano
 - Email: federico.terraneo@polimi.it
- 3) [Ahmad Baraani](#)
 - Professor at SHEIKHBAHAE University and Isfahan State University
 - Email: ahmadb@eng.ui.ac.ir
- 4) [Mohammad Javad Omid](#)
 - Associate Professor at Isfahan University of Tech. and Vice President of Isfahan Science and Technology Town
 - Email: omidi@cc.iut.ac.ir
- 5) Mohsen Omid
 - CEO of Tooska Espadan Co.
 - Email: momidi@gmail.com