Edwin Babaians

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Research Interests

Robotics

Artificial Intelligence

Computer Graphics

Embedded Systems

Education

M.Sc. Robotics Engineering – Amirkabir University of Technology *(Tehran Polytechnic)* ,

Tehran, Iran (2013) – "student"

B.Sc. Computer Hardware Engineering – Islamic Azad University South Tehran Branch,

Tehran, Iran (2008 to 2012) - GPA: 17.85 / 20 – Ranked 1st

Diploma of Mathematics – Alborz-e-no High school (2004 to 2007) – GPA: 19.44/20

Research Experience

-Research and Development - UAV Quadcopter Stability System - Association of Armenian University Graduates - To participate in International ArmRobotics Competitions in Armenia UAV League - 2012

- Research and Development - Alarm System for Competitions - Association of Armenian University Graduated (2009 - 2010)

Honours and Awards

-Certificate of participation in Robocup 2014 (Ranked 8 among 14 participants) (Brazil) - @Home league – AUT@Home Team

-Second Place award in IranOpen 2014 (Tehran) – @Home league – AUT@Home Team

-First Place award in Amirkabir University of technology International Robotic Competition 4th (ARAIF 2013) (Tehran) – Service Robots – AUT@Home Team

-First Place award in Amirkabir University of technology robotics & artificial intelligence festival 4th national kharazmi & robotics competitions (ARAIF 2012) (Tehran) – Service Robots – SUT Team

-Honored by the President of Islamic Azad University as a student of the elite among the total 2008 entries

-Ranked top 6 among 35 participants - International Competition of Game Developments in Armenia (OpenGame 2012) – The Ring 2 Game

-Ranked top 3 among all 200 students of Computer Hardware Engineering based on overall GPA–Islamic Azad University South Tehran Branch

Primer prize – Khwarizmi Youth Award (Innovation Prize) – Provincial level – Candidate for Nation Award – Team work

"Gooya saz" Software - Persian OCR and Text to Speech software – (12/2007)

- Primer prize - Khwarizmi Youth Award (Innovation Prize) – Provincial level – Candidate

For Nation Award - Team Work

"Guard Robot" – Security robot remotely connected to computer software – (12/2006)

- Ranked top 2% among more than 300,000 participants – Iranian Nationwide University

Entrance Exam (Konkoor-e-Karshenasi) (2008)

Work Experience

-Software Developer – Iranian Channel 1 TV Program ("Defa-e-Moghadas" TV Series Festival) - Developed live 3D statistic visualizer for TV Series, Ranked by Audience SMS's (2012)

-Software Developer – Iranian Sports TV Program, Tehran, 2010- Developed live soccer stats broadcasting software (2010)

-Software Developer – Iranian Sports TV Program, Tehran, 2014- Developed live volleyball stats broadcasting software (2014)

-Software Developer – Iranian Channel 1 TV Program ("Sin Mesle Serial" TV Series Festival) - Developed live 3D statistic visualizer for TV Series, Ranked by Audience SMS's (2013)

-Software Developer – Iranian Channel 5 TV Program ("Cinema Ekran" TV Series show) - Developed live 3D lottery selector from Audience SMS's. (2014)

-Software Developer – Develop a Restaurant Management system (Android based wifi ordering system) (2011)

- Software Developer – Develop a live statistic monitor for Android from windows application (Android based wifi monitoring system) (2014)

Academic Projects

- Design and Implementation of AVR Microcontroller Based WAV player (Microcontroller Lab Project

- Simulation of Drum Level Control with PID Controller with Simulink, Matlab (Linear Control Course Project)

- Implementation of Chat Application over TCP / IP in .Net C# (Network Lab Project) (2011)

- Game Engine Structure (Comparison of Basic Concepts) (Presentation) (2010)

- Simple Farsi OCR, based on Pattern Matching in C# (Advance Programming Course Project)

- Implementation of Graph editor application based on matrices in C# (DiscreteMathematics Course Project)

- Implementation of Human following robot with ARC - @home robot (Robot Navigation Project) (using ROS framework, Kinect, Openni and Nite, Opencv) (2013)

- Robot Navigation and data fusion (Kalman filter) with ARC - @home robot (Robot Navigation Project) (using ROS framework, compass sensor, odometry, Kalman filter) (2013)

Computer Software - Hardware Experience

-Advanced knowledge of Unity3d Game Development Environment (4 years)

-Advanced knowledge of 3dMax & V-Ray Rendering Plugin (3 years)

-Programming Languages Knowledge: C# (.net and mono), C /C++ (QT), Java, Visual Basic, Matlab

-Working with Proteus Microcontroller Simulator software (3 years)

-Working with Access / SQL-server / MySQL / SQLite Database systems (2 years)

-Working with CodeProject AVR Microcontroller programming compiler (3 years)

-Experience with Labview and NXT Lego robtos (0.5 year)

-Experience with VHDL – FPGA development (0.5 year)

-Experience with Microsoft Kinect development (windows SDK / Linux Openni) (2 years)

-Experience with Android development (Java / Xamarin mono / Unity3d) (2 years)

-Experience with Ubuntu Linux and Linux application development (1 year)

-Experience with ROS robotic framework (1 year)

-Experience with OpenCV and PCL libraries (1 year)

Languages

English, Persian, Armenian

References

Dr. Saeed Shiry Ghidary

Associate Professor

Amirkabir University of Technology
Computer Engineering & Information Technology Department

Web : http://ceit.aut.ac.ir/~shiry/

Prof. Mosen Bahrami

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