Ali Khoramshahi

Curriculum Vitae

Personal Information

Nationality	*Iranian*
Date of Birth	*28/3/1990*
e-mail	al_kh31@hotmail.com
web-page	al-kh.me

Education

2014–2016	**Bachelor of Science (Hons)**, *Teesside University*, Prague/Czech Republic. General Computing, First Class Honours
2009–2014	**Bachelor of Engineering**, *Tehran Azad University*, Tehran/Iran. Specialized in hardware
2009–2005	**High School**, *Alameh Tabatabai High School*, Tehran/Iran. Math-Physics diploma

Bachelor Project Title

Title	*HoS: Operating Environment based on HTTP protocols*
Description	A micro-service based, dynamically scalable operating environment/web framework designed to have host machines resources accessible through HTTP, WebSocket and AMQP protocol. As an output of this project following packages has published though node packet manager: hos-com, hos-api, hos-auth, hos-controller.

Experience

2015-2016	**Node.js** - **C# Developer(back-end and front-end)**, ZETTABOX, Prague/Czech Republic. Zettabox is a cloud storage provider in Europe, application development contains both server side and client side, the company's development structure is based on scrum. main tasks I've been working containing following:

- Introducing monitoring and administration tool to manage the systems core. Using micro-service base technologies on Express.js, rabbitMq.
- Full stack development for admin tools, including unit testing and code coverage. Using Jasmine and Istanbul
- Design and develop RabbitMQ messaging system based on AMQP protocol.
- Implementing SignalR Connection for being able to connect to server with various technologies such as WebSocket.
- Design and implement windows client features including interface(using WPF) ,logic and communication.
- Resolving the existing problems and debugging current code.

2014	**C++ Developer**, APIARY, Prague/Czech Republic.

Development the new future and expanding existing functions in Apiary Blueprint, one of the most reliable and well-known web API documentation tool. the task that has been implemented during the period of my contribution includes:

- ○ C-interface implementation of existing function to export the parser into ruby and python.
- ○ Implementation of late referencing inside the parser.
- ○ Configuring and fixing Snowcrash on windows.
- ○ Resolving the existing problems.

2010-2012	**Developer / Group Supervisor**, ISLAMIC AZAD UNIVERSITY - SOUTH TEHRAN BRANCH, Tehran/Iran.

Development and operating the rescue and quadrotor robots in SURG(StartUp Robotic Group). research and development during this time contained:

- ○ Developing an autopilot for quadrotor using STM32-F103 arm processor's.
- ○ Designing a system to control robotic arm by human interaction captured by Kinect.
- ○ Image feature extraction and matching.
- ○ Developing Remote operator controller for rescue robot over wireless network.
- ○ Designing a Dynamic topological Model Based on ANN.
- ○ research and implementation of new algorithm for simultaneous localization and mapping problem.

2009-2010	**Offshore C++ Programmer**, PHOTOCORE GMBH, Zurich/Switzerland.

- ○ Development and Testing of cylindrical and spherical panoramic high resolution image Viewer by using Qt, Coin3D and OpenInventor3D engine
- ○ Developing hardware security lock with HASP flash lock.

.

2008-2009	**Algorithm Designer and programmer**, TAHA PARALLEL PROCESSING, Tehran/Iran.

Development of cross-platform algorithm and GUI for `Cargo Loading` automate container loading process using Qt.

Awards

2014	Bursary award from Prague Collage
2008	National Astronomy Olympiad - first round

Computer skills

Programming Language

Basic	PYTHON, RUBY
Intermediate	NODE.JS,JAVASCRIPT, JAVA, OCTAVE, PHP, SQL,HTML, CSS
Advanced	C#, C and C++ (C++9, C++11)

Other Skills

RabbbitMQ, SignalR, ASP.Net, Qt,Basic CISCO networking knowledge, `GIT hub` and TFS code management

Qualifications

GRE (General)	Verbal 144, Quantitative 156, Writing 3.0
IELTS (Academic)	Listening 6.0, Reading 6.5, Writing 6.0, Speaking 6.0
Machine Learning	online course provided by Stanford University (ml-class.org)
IranOpen 2012	RoboCup Iran Open 2012 competition and symposiums certification of participation

Languages

English	**Fluent**
Persian	**Mothertongue**
French	**Basic**	*Basic words and phrases only*

Research Interests

Microprocessor Programming, Robot Design, Machine Learning, Computer Vision; Particularly below topics:

- Remote systems and cloud base services
- Micro-Service architecture using messaging and queue systems
- External logistic automation systems
- Image and video analysis for automation robotic navigation
- Developing neural network to create auto pilot for complex flyers
- Automatic Understanding of physical movements of user to control robots.
- Point cloud analyzing: automatic and supervised semi automatic feature extraction from point cloud.
- 3D point cloud extraction from video sequence.

Personal Hobbies

I like hiking in nature - literally off the beaten path - and listen to blues and country music. I enjoy semi-professional photography(last year I had my very first art work gallery in Tehran). I also play the electric guitar.