

# Ali Khoramshahi

## Curriculum Vitae

### Personal Information

Nationality *Iranian*  
Date of Birth *28/3/1990*  
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### Education

2014–now **Bachelor of Science (Hons)**, *Teesside University-Prague College, 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 *Cargo Loading*  
Description This project suggest a solution to resolve cargo planning and path optimization for an external logistic problem.

### Experience

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 by me 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.

2013–2014 **Programmers Supervisor**, *2BAAL, Tehran/Iran.*  
Managing developers group for script writing software.

- 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.
- 2007-2008 **Internship**, TAHA PARALLEL PROCESSING, Tehran/Iran.
- Development of simple GUI and testing of EYERIS project (Digital stereo plotter for aerial images).
  - Development of data structure for rendering high quality large size image using GDAL

## Awards

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

## Computer skills

### Programming Language

- Basic PYTHON, RUBY ,JSCRIPT  
Intermediate JAVA, OCTAVE,C#, PHP, SQL,HTML, CSS  
Advanced C and C++ (C++9, C++11) five years of professional experience

### Other Skills

Basic CISCO networking knowledge, GIT hub code management

## Qualifications

- GRE (General) Verbal 144, Quantitative 156, Writing 3.0  
IELTS Listening 6.0, Reading 6.5, Writing 6.0, Speaking 6.0  
(Academic)  
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*

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## Research Interests

Microprocessor Programming, Robot Design, Machine Learning, Computer Vision, GIS and Remote Sensing; Particularly below topics:

- 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.
- Conceptual feature extraction from image.
- 3D building construction by using stereo vision.
- 3D modeling.
- Bioinformatics.

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## 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.