

Alireza Ghasemi

Lausanne. Switzerland

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Education

École Polytechnique Fédérale de Lausanne

Lausanne, Switzerland PhD, Computer and Communication Sciences September 2011 - Present Supervised by Professor Martin Vetterli and Dr. Adam James Scholefield

Sharif University of Technology

Tehran, Iran September 2009 - August 2011

Sharif University of Technology

Tehran, Iran

B.Sc., Software Engineering

M.Sc., Artificial Intelligence

September 2005 - September 2009

Selected Professional Experience

École Polytechnique Fédérale de Lausanne

Lausanne, Switzerland September 2011 – Present

Doctoral Researcher - R&D Engineer

In charge for cutting-edge research in the areas of image retrieval, multi-camera systems, video analysis and image-based localization. I develop mainly in MATLAB, Java, JavaScript and Python.

- o Developed a patent and a track record of publications in light-field image retrieval and video analysis.
- Participating as an R&D engineer in the development of an outdoor urban localization system.
- o Developed a novel online game (using Play! and RESTful services) to exploit human computation paradigms in sentiment analysis.

DSP Lab - Sharif University of Technology

Tehran, Iran

Research Assistant

March 2010 - August 2011

In charge for development of an innovative image retrieval algorithm incorporating machine learning and user feedback.

o Developed a robust classification framework appropriate for massive, mostly unlabeled data.

Intelligent Information Systems (IIS) Laboratory

Tehran, Iran

Web Developer

October 2009 - March 2010

Peykasa Messageware Group

Tehran, Iran

Backend Service Developer

May 2009 - October 2009

Skills

Java Development: Expert. In-depth knowledge Working knowledge in Android development

JavaScript: Experienced in Node.js, Chrome ex- Web Development: Experiences in REST, Symtensions, frameworks, client-side scripting, etc.

C++: Experiences with OpenCV and STL.

Python: Experiences in Blender scripting, NumPy

and SciPy.

MATLAB: Proficient in Signal and Image Proof JavaSE, JavaFX, Swing, JDBC, Weka, etc. cessing, Computer Vision and Pattern Recognition toolboxes.

fony, Spring MVC, Play!, GWT, Grails, etc.

Typesetting: Fluent in LATEX.

Database Design: Experiences in SQL, ERD,

NoSQL (MongoDB, Firebase).

Languages

Persian: Native

English: Full professional proficiency French: Limited working proficiency **German**: Limited working proficiency

Arabic: Elementary proficiency

Used extensively in study and work. C1 level. Learning since 2012. Currently in B1 level. Learning since 2013. Currently in A2 level. Learned basics in high school.

Selected Publications and Patents

Method and Apparatus for Identifying Local Features: Alireza Ghasemi; Laurent Rime; Martin Vetterli, Swiss Patent No. 2013CH-1102, Filed June 2013.

On the Accuracy of Point Localisation in a Circular Camera Array: Alireza Ghasemi; Adam Scholefield and Martin Vetterli, IEEE International Conference on Image Processing (ICIP), 2015.

A Bayesian Approach to the Data Description Problem: Alireza Ghasemi et. al., AAAI Twenty-Sixth Conference on Artificial Intelligence (AAAI-12), 2012

Selected Honors and Awards

IEEE Signal Processing Society Travel Grant

Granted the IEEE SPS Travel Grant to attend the conference ICIP 2015.

Spring 2015 Lausanne, Switzerland

Lausanne, Switzerland

Lausanne, Switzerland

Qualcomm Innovation Fellowship 2015

Winner of the prestigious Qualcomm Innovation Fellowship (QInF'15).

Spring 2015

Doctoral Fellowship from the I&C School of EPFL

Granted full one-year fellowship to start PhD.

Fall 2011

Rank 1st in the Artificial Intelligence section of the Sharif University Ranked by GPA.

Tehran, Iran Summer 2011

Rank 1st in the nationwide graduate entrance exam in IT engineering

Among more than 13,000 students.

Tehran, Iran Summer 2009

Interests

Reading: Literature, History, Technology. Gaining general knowledge through studying novel topics.

References

Available upon request

Publications