



Alireza Ghasemi

Avenue de l'Eglise-Anglaise 14 – 1006 Lausanne – Switzerland

☎ +41 (78) 677 5131 • ☎ +41 (21) 693 1371

✉ alireza.ghasemi@epfl.ch • 📧 aghasemi.github.io • 🌐 ghasemialireza

🐦 a_ghasemi • 🌐 aghasemi • Born 18 April 1987, Iranian citizen.

Education

École Polytechnique Fédérale de Lausanne <i>PhD, Computer and Communication Sciences</i> Supervised by Professor Martin Vetterli and Dr. Adam James Scholefield	Lausanne, Switzerland <i>September 2011 – Present</i>
Sharif University of Technology <i>M.Sc., Artificial Intelligence</i>	Tehran, Iran <i>September 2009 – August 2011</i>
Sharif University of Technology <i>B.Sc., Software Engineering</i>	Tehran, Iran <i>September 2005 – September 2009</i>

Selected Professional Experience

École Polytechnique Fédérale de Lausanne <i>Doctoral Researcher - R&D Engineer</i> 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. <ul style="list-style-type: none">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.Developed a novel online game (using Play! and RESTful services) to exploit human computation paradigms in sentiment analysis.	Lausanne, Switzerland <i>September 2011 – Present</i>
DSP Lab - Sharif University of Technology <i>Research Assistant</i> In charge for development of an innovative image retrieval algorithm incorporating machine learning and user feedback. <ul style="list-style-type: none">Developed a robust classification framework appropriate for massive, mostly unlabeled data.	Tehran, Iran <i>March 2010 – August 2011</i>
Intelligent Information Systems (IIS) Laboratory <i>Web Developer</i>	Tehran, Iran <i>October 2009 – March 2010</i>
Peykasa Messageware Group <i>Backend Service Developer</i>	Tehran, Iran <i>May 2009 – October 2009</i>

Skills

Java Development: Expert. In-depth knowledge of JavaSE, JavaFX, Swing, JDBC, Weka, etc. Working knowledge in Android development

JavaScript: Experienced in Node.js, Chrome extensions, 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 Processing, Computer Vision and Pattern Recognition toolboxes.

Web Development: Experiences in REST, Symfony, 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

Used extensively in study and work. C1 level.

French: Limited working proficiency

Learning since 2012. Currently in B1 level.

German: Limited working proficiency

Learning since 2013. Currently in A2 level.

Arabic: Elementary proficiency

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.

Lausanne, Switzerland

Spring 2015

Qualcomm Innovation Fellowship 2015

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

Lausanne, Switzerland

Spring 2015

Doctoral Fellowship from the I&C School of EPFL

Granted full one-year fellowship to start PhD.

Lausanne, Switzerland

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