

# Marzieh Razavi

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## Education

- Mar. 2013 – **PhD**, *École Polytechnique Fédérale de Lausanne*, Lausanne, Switzerland, Electrical Engineering.  
Present Supervised by Professor Hervé Boudlard and Dr. Mathew Magimai.-Doss
- Sep. 2010 – **M.Sc.**, *Simon Fraser University*, Vancouver, Canada, *Computing Science*.  
Aug. 2012 Supervised by Professor Anoop Sarkar  
Overall GPA: 3.6/4
- Sep. 2005 – **B.Sc.**, *Sharif University of Technology*, Tehran, Iran, *Computer Engineering*.  
Sep. 2009 Overall GPA: 17.22/20

## Selected Professional Experience

- Mar. 2013 – **Doctoral Researcher**, *Idiap Research Institute*, Martigny, Switzerland.  
Present
  - Working mainly on acoustic data-driven grapheme-to-phoneme conversion, pronunciation lexicon development using automatically derived units, and under-resourced language speech recognition.
  - Technologies: Python, HTK toolkit, Quicknet, Shell scripting.
- Sep. 2010 – **Research Assistant**, *Natural Language Lab - Simon Fraser University*, Vancouver, Canada.  
Dec. 2012
  - Worked on ensembling diverse clustering-based dependency parsers in MSTParser framework.
  - Applied domain-adaptation techniques to improve parsing of radiology reports.
  - Technologies: Java, Python, Shell scripting.
- Sep. 2010 – **Teaching Assistant**, *Simon Fraser University*, Vancouver, Canada.  
Jun. 2012
  - Computer architecture course.
- Mar. 2009 – **R&D Engineer**, *ASR Gooyesh Pardaz Ltd.*, Tehran, Iran.  
Jan. 2010
  - Designed a robust natural language understanding component for a flight information system.
- Jul. 2008 – **R&D Intern**, *ASR Gooyesh Pardaz Ltd.*, Tehran, Iran.  
Sep. 2008
  - Designed a robust parser for human-machine dialogue for banking systems.

## Selected Skills

Programming languages	Java, Python, C++, R	Typesetting	LaTeX, Microsoft Word
Operating Systems	Linux, Mac OS, MS Windows		

## Languages

Persian	Native	English	Full professional proficiency
French	Elementary proficiency	Arabic	Elementary proficiency

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## Selected Publications

- Sep. 2016 Improving under-resourced language ASR through latent subword unit space discovery, *Marzieh Razavi* and Mathew Magimai.-Doss, in **INTERSPEECH**, San Francisco, USA.
- Apr. 2016 Acoustic data-driven grapheme-to-phoneme conversion in the probabilistic lexical modeling framework, *Marzieh Razavi*; Ramya Rasipuram and Mathew Magimai.-Doss, in **Speech Communication**.
- Nov. 2015 Pronunciation Lexicon Development for Under-Resourced Languages Using Automatically Derived Subword Units: A Case Study on Scottish Gaelic, *Marzieh Razavi*; Ramya Rasipuram and Mathew Magimai.-Doss, winner of a Best Student Paper Award in **Language and Technology Conference (LTC)**, Poznan, Poland.
- Apr. 2015 An HMM-Based Formalism for Automatic Subword Unit Derivation and Pronunciation Generation, *Marzieh Razavi* and Mathew Magimai.-Doss, in **IEEE ICASSP**, Brisbane, Australia.
- Apr. 2015 Integrated Pronunciation Learning for Automatic Speech Recognition Using Probabilistic Lexical Modeling, Ramya Rasipuram; *Marzieh Razavi* and Mathew Magimai.-Doss, in **IEEE ICASSP**, Brisbane, Australia.
- Sep. 2014 On Recognition of Non-Native Speech Using Probabilistic Lexical Model, *Marzieh Razavi* and Mathew Magimai.-Doss, in **INTERSPEECH**, Singapore city, Singapore.
- Apr. 2014 On Modeling Context-dependent Clustered States: Comparing HMM/GMM, Hybrid HMM/ANN And KL-HMM Approaches, *Marzieh Razavi*; Ramya Rasipuram and Mathew Magimai.-Doss, in **IEEE ICASSP**, Florence, Italy.
- Dec. 2013 Probabilistic Lexical Modeling and Unsupervised Training for Zero-Resourced ASR, Ramya Rasipuram; *Marzieh Razavi* and Mathew Magimai.-Doss, in **IEEE ASRU**, Olomouc, Czech Republic.
- Jun. 2011 An Ensemble Model that Combines Syntactic and Semantic Clustering for Discriminative Dependency Parsing, Gholamreza Haffari; *Marzieh Razavi* and Anoop Sarkar, in **ACL**, Portland, USA.

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## Honors & Awards

- Nov. 2015 **Granted the Best Student Paper Award**, *Language and Technology Conference*, Poznan, Poland.
- Jun. 2014 **Awarded the ISCA Student Travel Grant to Attend INTERSPEECH 2014**, *International Speech communication Association (ISCA)*, Lausanne, Switzerland.
- Sep. 2011 **Recipient of SFU Graduate Fellowship**, *Simon Fraser University*, Vancouver, Canada.
- Summer 2005 **Ranked 258<sup>th</sup>**, *Among more than 300000 students in the nationwide university entrance exam*, Tehran, Iran.

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## Activities

- Professional Activities ISCA, IEEE and IEEE SPS student member.
- Extracurricular Activities Poetry, Literature and Calligraphy.