# Behrooz Vedadian

*Résumé*

## Education

**2013–Present**   **Ph.D. Candidate**, *Amirkabir University of Technology(#79 in CS)*, Artificial Intelligence, *GPA − 19/20*.
Research field: "Statistical Machine Translation" under supervision of Dr. Mohammad Rahmati and Dr. Shahram Khadivi

**2005–2008**   **M.Sc.**, *Amirkabir University of Technology(#79 in CSE)*, Communication Systems Engineering, *GPA − 15.01/20*.
Thesis title: "Signal Detection in nonstationary environments using WaveLets" under supervision of Dr. Hamidreza Amindavar

**2000–2005**   **B.Sc.**, *Sharif University of Technology(#60 in Engineering)*, Electrical Engineering, *GPA − 15.10/20*.
Thesis title: "Speaker identification using HMMs" under supervision of Dr. Mohmmad Mahdi Nayebi

**1996–2000**   **Diploma**, *National Organization of Developement of Exceptional Talents(NODET)*, Mathematics and Physics, *GPA − 19.5/20*.

## Experience

### Vocational

**2015–Present**   **Researcher and Senior Software Engineer**, Targoman Intelligent Processing Co., Tehran.
- A Computer Assistant for translation was designed and implemented which is named Tarjomyar, built using javascript language while preserving the modularity and object oriented design.
- An experimental Neural Machine Translator for English-Persian was trained and successfully integrated into Tarjomyar.

*South Kerman Street, Rezayee Alley, No.7, Unit 6 − Tehran, Iran*
*+98 915 584 0296 • +98 21 2250 2137*
*vedadian@aut.ac.ir • vedadian.com*

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| 2013–2015 | **Researcher and Senior Software Engineer**, HLT Lab, Amirkabir University of Technology. |

- We used Moses open source statistical translation system to develop an online translation service for Persian-English languages.
- A text processing library was developed to preprocess,tokenize and enhance input sentences given to translation service.
- We also developed a *robust* open source phrase based statistical machine translation decoder title Targoman available on GitHub. This was done to remedy the instability and unintegrated software design of Moses toolkit.

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| 2009–2014 | **R&D Engineer**, Hoda System Co. Ltd., Tehran. |

- We developed a Persian printed text recognition software which included layout analysis.
- We also tailored the OCR library for extraction of Egyptian ID card information in course of cooperation with Egypt City Bank Co.
- We also incorporated natural language processing for improving the OCR results quality
- I developed a couple Web Applications for a demonstration version of digital document archiving that used OCR and image processing techniques to ease information extraction

## Teaching

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| 2001 | **Teacher's Assistant**, Computer Programming, Sharif University of Technology. |
| 2014 | **Teacher's Assistant**, Statistical Natural Language Processing, Amirkabir University of Technology. |

Instructed by Dr. Shahram Khadivi

## Miscellaneous

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| 1998–2013 | **Freelance**. |

I have participated in various software development tasks using wide range of tools and programming languages ranging from FoxPro! to 8051 assembly and prepared a detailed Pascal programming tutorial for Roshd magazine.

## Awards

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| 1997 | Ranked $5^{th}$ in Iranian national computer programming contest, held in Tehran. |
| 1998 | Ranked $3^{rd}$ in Iranian national computer programming contest, held in Isfahan. |
| 1999 | Qualified to enter the second level of national students Physiscs Olympiad |
| 1999 | Qualified to enter the second level of national students Mathematics Olympiad |
| 2013 | Ranked $9^{th}$ in national Ph.D. entrance examination |

## Computer skills

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| Basic | Perl, Java, Inkscape |
| Intermediate | Python, Linux, BASh Scripting, Adobe Photoshop |
| Advanced | C++, C#, LaTeX, MatLab, PHP, html, JavaScript, CSS |

## Languages

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| Persian | **Mothertongue** |
| English | **Fluent** |

## Interests

- Research on Machine Learning
- Drawing and Painting
- Storytelling and Cinema

- Mathematics
- Graphic Design