

SKILLS

PROGRAMMING | C++, Python, λ -calculus, Javascript

DEEP LEARNING TOOLKITS | PyTorch, Tensorflow, ~JAX, Hugging-Face Transformers

DEEP LEARNING FOUNDATIONS | Linear algebra, Convex Optimization, Measure theory, Modern statistics, Matrix Calculus

FRONTEND | Qt, Vanilla HTML+CSS+JS, ReactJS

EXPERIENCE

RESEARCHER AND SENIOR SOFTWARE ENGINEER | Targoman Intelligent Processing Co. Pjc. (2015-Present)

- Development of a neural machine translation engine based on Marian-NMT toolkit (C++)
- Development of a PDF layout analysis engine from scratch (Javascript & WASM)
- Development of a lightweight fast API server for neural machine translation engine on top of libevent (C++)

I co-founded Targoman with my supervisor and one of the lab colleges. Our main end-user software can be examined at <https://tarjomyar.ir/test.html>

RESEARCHER AND SENIOR SOFTWARE ENGINEER | HLT Lab AmirKabir Univ. of Tech. (2013-2015)

- Development of a text processing library for Persian (C++)
- Development of a robust statistical translation engine (C++)

Resulting software and libraries can be found in [Targoman's github](#)

RESEARCHER AND SENIOR SOFTWARE ENGINEER | Hoda System Co. Ltd. (2009-2014)

- Implementation of a convolution based OCR system for extracting Egyptian ID card information for Egypt City Bank using OpenCV (C++)
- Implementation of multilayer perceptron using Intel MKL (C++)

TEACHER'S ASSISTANT | Computer Programming Course at Sharif University of Technology (in 2001)

TEACHER'S ASSISTANT | Statistical Natural Language Processing at AmirKabir University of Technology (in 2014)

HONORS

NATIONAL COMPUTER PROG. CONTENT

- Ranked 5th in 1997
- Ranked 3rd in 1998

NATIONAL PH.D. ENTRANCE EXAM.

- Ranked 9th in 2013

EDUCATION

Ph.D | AmirKabir Univ. of Tech.

Computer Engineering

Artificial Intelligence

"Learning sequence to sequence maps by incorporating embedded input structure in deep networks for machine translation"

Dr. Shahram Khadivi & Dr. Mohammad Rahmati

M.Sc | AmirKabir Univ. of Tech.

Electrical Engineering

Communication Systems

"Signal Detection in Nonstationary Environments using Wavelets"

Dr. Hamidreza AminDavar

B.Sc | Sharif Univ. of Tech.

Electrical Engineering

Electronics

"Speaker Identification using Hidden Markov Models"

Dr. Mohammad Nayeibi

Diploma | National Organization of Development of Exceptional Talents

Mathematics & Physics