Alireza Hariri

Data Scientist · Software Engineer · Deep Learning Specialist

Experience _____

Data Scientist Tehran

Hara co. 2020 - 2024

• Designed and developed a speech search-engine on a 50,000-hour dataset, which can find queries based on combinations of keywords and metadata filtering.

- Trained and managed large-scale speech-to-text models, handling over 70GB of compressed data.
- Built a neural network from scratch for speech-understanding tasks.
- Achieved up to 20x speed optimizations in text normalization, improving processing efficiency.
- Improved inference time by 55% in a critical production bottleneck.
- Improving labeling pipelines.

Developer Tehran

FRONTEND DEVELOPER AT KALAPICH

May 2018 - August 2018

- Created the website with react from scratch.
- A bit of data analyses with python.

Intern Tehran, Shahid Beheshti University

NATURAL LANGUAGE PROCESSING LAB.

May 2019 - August 2020

- Trained a question pair similarity detection model with pytorch.
- Worked with word embeddings and convolution.
- Learned pytorch here.

Example Projects _____

Simple Retriever

alireza-hariri/simple-retriever

A simple wrapper around common retrieval tools in Python

- Dense and sparce retrieval methods.
- Examples of typo-tolerant tf-idf retrieval by sk-learn.

Long-Polling tool for python

Long-polling tool for asynchronous Python backend.

- 🞧 alireza-hariri/long-polling
- Real-time message passing between server and clients without using sockets.
- Asynchronous (with asyncio).
- load-tested (with geventhttp).

Skills _

Languages Python, C, JavaScript

Spoken Languages English, Persian

tools pytorch, numpy, linux, scikit-learn, flask

Education

University Of Tehran

MASTER OF SCIENCE (MS), ARTIFICIAL INTELLIGENCE AND ROBOTICS

September 2018 - October 2021

- Enjoyed practical and theoretical courses such as <u>Active Learning</u>, <u>Complex Networks</u>, and <u>Statistical Inference</u>.
- Thesis: Neural Architecture Search on residually connected networks.

University Of Tehran

BACHELOR OF SCIENCE (BS), ENGINEERING SCIENCE (ELECTRONICS ENGINEERING)

October 2011 - September 2016

• Learned a lot of things like <u>FPGA-Programming</u> and <u>Circuit-Design</u> in this period.