

Mohammad "Matt" Namvarpour

halfingwizard.github.io | mnamvarpour@gmail.com | linkedin.com/in/matt-namvarpour

EDUCATION

Drexel University

PhD in Information Science

Philadelphia, PA

2023-Present

K. N. Toosi University of Technology

Master of Artificial Intelligence

Tehran, Iran

2020-2022

- Thesis: Speech emotion recognition using neural attention-based architectures
- Notable Courses: Machine Learning, Neural Networks, Pattern Recognition, Natural Language Processing, Speech Processing
- GPA: 18.15/20 (4/4)

Iran University of Science and Technology

Bachelor of Mechanical Engineering

Tehran, Iran

2016-2020

- GPA: 15.97/20 (3.2/4)

EXPERIENCE

Teacher Assistant

K. N. Toosi University of Technology

February 2022 – July 2022

Tehran, Iran

- Speech and Natural Language Processing course

Teacher Assistant

K. N. Toosi University of Technology

October 2021 – December 2021

Tehran, Iran

- Machine Learning course

RESEARCH INTERESTS

Human-AI Interaction

Machine Learning

Natural Language Processing

PUBLICATIONS

Comprehensive study of monatomic fluid flow through elliptical carbon nanotubes August 2020

Physics of Fluids 32 (9), 092006

- Rezaee, M., Namvarpour, M., Yeganegi, A. and Ghassemi

Fluid flow dynamics in deformed carbon nanotubes with unaffected cross section March 2022

Advances in nano research 12 (3), 253-261

- Rezaee, M., Yeganegi, Namvarpour, M., A. and Ghassemi

TECHNICAL SKILLS

Programming Languages: Python

Libraries: Pytorch, Keras, Scikit-Learn, WandB, Gradio, HuggingFace, Numpy, Pandas, Matplotlib, Seaborn, Plotly

Industry Knowledge: Presentation

Languages: Persian (Farsi), English

PROJECTS

Shereno: A Dataset of Persian Modernist Poetry

December 2021 - January 2022

Dataset

- Available on Kaggle: kaggle.com/datasets/elhamaghakhani/persian-poems
- Web scraped from shereno.com utilizing the beautiful soup library, this collection of Persian modernist poetry includes over 4000 poems by Iranian contemporary poets. Each poem's metadata, including the title, author, and title of the book, has also been scraped.
- Created in collaboration of Ms. Elham Aghakhani, AI Student at K.N. Toosi University

Persian Questions Dataset

December 2020 - February 2021

Dataset

- Available on Kaggle: kaggle.com/datasets/halflingwizard/persian-questions
- A set of 600 simple Persian questions in 4 different categories that were hand crafted with the intention of teaching a voice assistant.
- Created in collaboration of Ms. Fatemeh Naderi, CE Student at Ferdowsi University of Mashhad

Persian (Farsi) Intent Classification and Slot Filling

October 2020 - January 2021

Deep learning model

- Github Repo: github.com/HalflingWizard/FA-Intent-Classification-and-Slot-Filling
- A Joint Model for Intent Classification and Slot Filling in Persian Language using BERT. The Keras library was used to build the neural network, and HuggingFace was used to load the ParsBERT language model, which is the Persian equivalent of the BERT language model.

Thermodynamic Calculator

April 2019 - May 2019

Android app

- Available on Cafe Bazaar (an Iranian android app store): cafebazaar.ir/app/com.namiapps.thermocalc
- "Thermodynamic Calculator" is a native android app that enables you to calculate thermodynamic properties of different industrial important materials based on the CoolProp thermophysical properties database for pure fluids.

BMI Calculator

August 2016- April 2017

Android app

- Available on Cafe Bazaar (an Iranian android app store): cafebazaar.ir/app/com.namiapps.bmical
- A simple BMI calculator android app created using front-end web development skills with the help of the Cordova SDK. This straightforward program determines the user's BMI based on their height and weight. Additionally, it suggests a healthy weight for them.

LICENSES & CERTIFICATIONS

IELTS Academic Training (Overall Band Score: 8.0)

November 2021 - November 2023

IELTS Official

- Credential ID: 21IR010182NAMM120A
- Listening: 8.5
- Reading: 9.0
- Writing: 7.5
- Speaking: 7.0

Deep Learning: Applications & Tools

March 2021

IEEE Iran section

- Credential ID: 147489
- Workshop held in conjunction with 26th Computer Society International Computer Conference
- Covered topics: Review and introduction of various areas of deep learning, including machine vision, natural language and sound processing, GAN models and deep reinforcement learning systems

Deep Learning Specialization

September 2020

Coursera

- Credential ID: 89JQ3X8BNLWQ
- Composed of 4 courses: 1- Neural Networks and Deep Learning, 2- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization, and Optimization, 3- Structuring Machine Learning Projects, 4- Convolutional Neural Networks, 5- Sequence Models

Visual Elements of User Interface Design

May 2020

Coursera

- Credential ID: WWH99Z7GZHBD
- Part of the UI / UX Design Specialization
- Centered on creating and communicating meaning through the use of color, typography, and imagery to make interfaces work clearly and effortlessly, which is part of an interface designer's skill set.

HOBBIES

YouTube Channel (HalflingWizard)

April 2021 - Present

YouTube

- Channel link: youtube.com/c/HalflingWizard
- Channel contains videos about artificial intelligence, machine learning, and deep learning.

HONORS & AWARDS

LG Global Challenger Competition 2018 Finalist

August 2018

LG Electronics DFZE, Tehran Liaison Office

- Research Expedition to China funded by LG Electronics DFZE, Tehran Liaison Office