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Karim Akhavan Azari
CV

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Education

Sharif University of Technology, M.Sc., Tehran, Tehran — Sep 2019 - Jan 2022, GPA: 3.86/4

Major:	Computational Linguistics
Advisor:	Dr. Hossein Sameti
Thesis:	Conversion of Persian Colloquial Texts into Official Texts using Unsupervised Learning Methods

University of Guilan, B.A., Guilan, Rasht — Sep 2015 - Aug 2019, GPA: 3.83/4

Major:	English Language and Literature

Research Interests

- Machine learning and deep learning; NLG; Style transfer; Text modification; Text comprehension; Opinion mining; Classification; Human-AI Interaction;
- **Current Research:** Style transfer; Text modification; NLG; Text classification

Honors and Awards

- **Ranked 9th in the National Entrance Exam for Universities**
  Received a scholarship in the form of tuition waiver by Sharif University of Technology

- **Academic Excellence Scholarship**
  Received a discount on the tuition fee for the duration of education by University of Guilan

- **Awarded for the Digital Section of HARKAT Festival in University of Guilan**
  I was the head of the group which developed a content-sharing platform inside the University of Guilan.

- **Funded by Guilan Science and Technology Park (GSTP) on Developing a Children-Oriented Software to Learn Programming**

- **Funded by Guilan Science and Technology Park (GSTP) To Develop an Online Shopping Platform with Image Similarity Search by Guilan Science and Technology Park (GSTP)**

Publications

Karim, A.A., & Bahrani, M. (2021). *Product Review Classification Using Deep Learning* (under review)

Work Experience

Saho Style - 2020-Present
Technical Manager

An online fashion institute which educates and helps students to enter the fashion industry by selling their production on its shopping platform.

- Processed and analyzed customer behavior data to optimize marketing strategies
- Developing an online shop with image search ability
- Server Administrator of online classes

TechTime - 2018-2020
React Developer/Co-Founder - Part-time

An educational tool to teach computer programming to kids aged 7-14. The project was funded and supervised by Guilan Science and Technology Park (GSTP).

- Developed a game-like application which was playable through coding
- Planned the learning content together with the team
- Taught programming to different classes with more than 15 children in each class (aged 10-12) with tools like Scratch to gather feedback on developing our own application and understanding the behavior of the target users

Programming Instructor at Aryan Shabake - 2019-2020
Contract-based
- Taught courses on PHP
- Taught a basic programming course for game development
- Taught a course on programming for Wordpress platform

Freelance Developer - 2016-2020
- Developed a website for a news agency
- Developed and maintained a couple of websites for different educational institutions
- Developed different chatBots, hosted on Telegram messenger
- Developed a Windows Phone application for calculations of elevator's capacity

Skills

- **Programming:**
- **Python:** Primarily for deep learning and machine learning related tasks in NLP

- **Julia:** Used as a secondary language, mostly to experiment on the features of this new language and in comparison with the same codes implemented in Python

- **Matlab:** Used it to complete the assignments and projects in the Speech Processing course, like working on signals and using windowing functions, signal quantization, and analyzing audio spectrograms

- **NLP Tools:** SpaCy, Gensim, NLTK, SketchEngine, WordNet, Hazm

- **Deep Learning & Machine Learning Tools:** Keras (with Tensorflow backend), PyTorch, Scikit-learn

- **Database:** Proficient at using MySQL and able to work with MongoDB
- **Others:** Javascript, PHP, Bash, Fronted/Backend Web Frameworks (including NodeJS, Bootstrap, jQuery, etc.)

- **Technical:** Unix/Linux; Git; Server Administration (Linux); Wordpress; 3D Modeling (Blender); Arduino P
  - **Praat:** Used in Speech Processing course and Laboratory Phonology course to analyze audio signals through spectrograms and analyzing different aspects of sounds like the power spectrum, frequency properties, and also transcribing audio files for further research tasks
  - **Others:** Photoshop; Illustrator; Prototype/Wire-framing Apps (e.g. Adobe XD)

Community Services

- **Speech Processing Laboratory, Sharif University of Technology** - 2021-Present
  - Weekly lecturer on different topic's surrounding artificial intelligence, especially NLP (lecture's repository)
  - Research assistant
  - Maintainer of Lab's website

- **Organizing Committee Member** - 2015-2021
  - School on Artificial Intelligence with Applications in NLP and Machine Vision (AICademy), University of Guilan, Rasht, Iran
    - I was also an instructor for a session on different NLP tasks, tools, pipelines, and the intuition behind different concepts in NLP.
  - National Student Conference of Cognitive Science
  - First & Second National Student Conference on English Language Studies

- **Scientific Association, University of Guilan** - 2015-2019
  - Member of the association's journal editorial board, the Herald magazine
  - Developer of educational tools such as an online bot for the explanation of literary devices, summaries of books, poem translations, etc.
  - Developer of association's website

- **Volunteer English Instructor at Hedayat Foster House to Children Aged 9 to 18 -** 2018-2019

Workshops & Courses

- **Javascript Developer Course** - Iran Technical and Vocational Training Organization (I.R.T.V.T.O) (Scored 93/100)

- **Fifth IPM Advanced School on Computing: Artificial Intelligence**
  A 4-days workshop on topics like explainable and reliable ai, prompting in NLP, unpredictability prediction, self-supervised learning, and reinforcement learning

- **The Data Science Era in Academia and Industry** - Tehran Institute for Advanced Studies (TeIAS) - August 2021

- **"Learning How To Learn" Course** - Coursera
  This course enhanced my understanding of brain's mechanisms in learning which was both of personal and professional benefit. Also, one of the instructors of the course was Dr. Terrence Sejnowski who is an important figure in the field of artificial intelligence and it was good to know his views on learning.

- **"Self-Directed Learning of Simultaneous Translation" Workshop**
  This workshop taught methods on how to become better at translating a language at real time.

Other Publications

Artificial Intelligence and the Revolution in the Energy Industry (in the Exergy magazine of Energy and System Management Scientific Association) - May 2021

Languages

- **Persian:** Native
- **English:** Fluent
- **German:** Novice

References

References will be provided upon request.