# **Armin Ashrafi**

# **B.Sc in Computer Science**

#### **Armin Ashrafi**

Number 16 Alvandi, 12 Farvardin Tehran, Iran

Phone: +989109862441

Email: arminneashrafi@gmail.com Github: https://github.com/Arminismus LinkedIn: Armin Ashrafi | LinkedIn

# Work Experience

#### Chashmyar.ir Startup / Computer Vision Internship

January 2023 - March 2023, Tehran

- 1. Modeling Making CNN Models for Keratitis Recognition on proprietary ocular datasets (Research Project)
- 2. Web scraping: finding and cataloging eye datasets.
- 3. Writing and Editing of research papers/ Editing Manuscripts
- 4. Data Collection and Management: Using data versioning tools like Git for Data.

#### **Shastad.ir E-Learning /** Computer Science Instructor

August 2021 - PRESENT, Tehran

- 1. Programming Course Material Code for Each Video Subject
- 2. Video Production Quality Control: Verifying the Video Correctness and Information
- 3. Courses Produced: Linear Algebra, Probability theory, Python, Binary Logic.
- 4. Pedagogical Planning of each course
- 5. Video Production Consultation

#### Respina Talk and Iran Mehr Language Institutes / Foreign

Language Teacher

September 2017 - September 2022, Tehran

English (A1-C2), French at A1 - A2 Levels.

#### **Education**

#### Islamic Azad University (IAU) B.Sc / Computer Science

December 2017 - June 2023, Tehran

Final GPA: 3.72

## Salam Mofid / High School Diploma Final Average Grade: 19.27 of 20 September 2013 - June 2017, Tehran

### Skills

#### Languages:

1. English IELTS Score 8.5:

Listening 9.0, Reading: 8.0, Writing: 7.5, Speaking: 8.5

- 2. Persian Native
- 3. French CEFR B2
- 4. German CEFR A2

**Coding:** Python, C++, R, Functional understanding of SQL and relational databases, OOP principles, Agile Development

**ML/Al:** Tensorflow- Keras, Pytorch, Sci-kit Learn (and most learning algorithms Associated with them (e.g. regression, clustering, ...)), Tree-based methods, bagging, boosting.

**Deep Learning:** Computer Vision, Tabular Datasets and Deep Reinforcement Learning (Courses and Textbooks)

**Relevant Mathematics:** Linear Algebra, Probability Theory, Hypothesis testing, General Mathematical Maturity for Proof oriented Research

**RL:** Theoretical Background (Courses and Textbooks) and implementations of various example problems (Most are available on Github)

#### Soft-Skills:

- Passion and Motivation for Problem Solving
- Analytical Thinking, Divergent (Lateral) Thinking
- Attention to Detail
- Effective Communication and Teamwork
- Independent Thinking and Motivation

Misc: Teaching, Web Scraping, Academic Research, Curiosity

## **Relevant Projects**

#### **Tabular Machine Learning:**

- 1. Disease Detection using Decision-Trees (Breast Cancer and other publicly available datasets)
- 2. K-means Clustering for category identification (Identifying Product interests of Users in a Shopping website)
- 3. Various other small projects and exercises

#### Deep Learning:

- 4. Transfer Learning: Image Clustering Using VGG16 and InceptionV3
- 5. Autoencoders: Image Denoising Tensorflow and Keras for Keratitis Classification
- 6. Deep Learning: Voice to Pic Using CNNs to detect Keywords in Waveforms (as part of my involvement in my bachelor's degree project)

#### **Reinforcement Learning:**

- 1. Game of Pig, Tabular Q- Learning
- 2. Programming Assignments for the Coursera RL Course
- 3. DQN, TD3, DDPG on classical OpenAI Environments

4. Teaching: the book Grokking Deep Reinforcement Learning

#### Miscellaneous:

- 1. Web Scraping: Finding Ocular datasets using an automated Web Crawler
- 2. Teaching Assistantship: Combinatorics, Abstract Algebra
- 3. Probability Simulations for my Probability course
- 4. Numerical Solutions to ODEs + Illustrations
- 5. Genetic Algorithms: Topics in Computer Science Course

# **Relevant Courses**

#### RL:

- 1. Reinforcement Learning Specialization: Coursera
- 2. Reinforcement Learning By David Silver
- 3. Sutton and Barto: Reinforcement Learning
- 4. Grokking Deep Reinforcement Learning

#### DL/ML:

- 1. Deep Learning Specialization by Deeplearning.Al
- 2. Machine learning Specialization: Deeplearning.Al
- 3. Faradars: Machine Learning
- 4. Maktabkhooneh: Python Programming
- 5. Object Detection via YOLO: Youtube

**Awards** 

**Top student:** Top Student of the year at IAU - 2021

**CS Student Committee:** Member of the Student CS Committee at IAU