

# Mohammad Mahdi Safari

JUNIOR DATA SCIENTIST  
UNDERGRAD STUDENT  
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## PROFILE

As a student in CE, I have always tried to be curious and open to new techs and concepts, to continue being hardworking and pursue my ideals. I have an interest in a broad subject of computer science in general but there has been a couple of years that I am keen on Artificial Intelligence and to be specific Machine learning and its related algorithms. Personally, I have problematic-based and systemic thinking behavior and suitable for working in groups and inner leadership characteristics.

## EDUCATION

**B.Sc. in Computer Engineering**  
*Amirkabir University of Technology,* *2016 - present*

**Diploma in Mathematics and Physics**  
*National Organization of Development of Exceptional Talents, Tehran, Iran,* *2008 - 2016*

## RESEARCH INTERESTS

- Statistics
- Algorithms
- Machine Learning
- economics [behavioral]

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## AWARDS & ACHIEVEMENTS

- Ranked 137st in the **National University Exam for B.Sc.**, among more than 160k participants, Aug 2015

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## WORK EXPERIENCE

**ParsaSharif Institute**  
*Position : Junior system developer* *Oct '17 - Sep '18*

- Customising the style of next cloud for internal use.
- Building a customize automatic build system based on jenkins and docker.
- Really not relevant to the my interests.

**Hamgam IT**  
*Position : Junior Data Scientist* *Jun '18 - Dec '18*

- Research about the structure of Recommender system and their usage in geographical regions.
- Working on Data anonymization based on k-anonymity and entropy based method.

**Amirkabir HPC**  
*Position : Junior Data Scientist* *Jan '21 - Present*

- Creating a dockerized jupyter notebook server on web using high-tech enterprise edition Nvidia GPUs.
- ...

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## ACADEMIC PROJECTS

### BioInformatic HMM

*Supervisor : Dr. Hossein Zeinali*

*Fall '20*

- Identification of the most probable path of genetic mutations in RNA sequences.
- Using Python programming language and Biopython library.
- Implementation of basic sequence homogeneity metrics.
- Implementation of visualization for basic UPGMA, Neighbour Joining, Parsimony for Phylogenetic Trees.

### Information Retrieval

*Supervisor : Dr. Ahmad Nikabadi*

*Spring '20*

- Developing a web page for showing a repository or news content and implementing basic IR metrics for accuracy.
- Implementing manually tf-idf for page ranking.
- Implementing precision recall visualization & ROC charts

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## COMPUTER SKILLS

**Languages:** Python **Familiar:** SQL, C, JAVA, js(VueJs)

**Frameworks&Libraries:** Numpy, scikit-learn, pandas, matplotlib

**Linux:** Lpic 101, Lpic 102

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## RELEVANT COURSES

- Statistics
- Linear Algebra
- Introduction to Artificial Intelligence
- Data Mining
- Information Retrieval
- Bioinformatics

## ONLINE COURSES

### Ongoing:

- Linear Algebra  
*Gilbert Strang [MIT OpenCourseWare]*
- [Probability Theory and Application](#)  
*Dr.Alishahi [sharif ocw]*
- [Machine Learning](#)  
*Andrew Ng [Coursera]*

## BOOKS

### Ongoing

- Discrete and Combinatorial Mathematics An Applied Introduction  
*Ralph P.Grimaldi*
- Introduction to Linear Algebra  
*Gilbert Strang*
- A First Course in Probability  
*Sheldon m.Ross*
- Introduction to Probability and Statistics for Engineers and Scientists  
*Sheldon m.Ross*

- Probability Statistics for Engineers & Scientists  
*Ronald E. Walpole*