ZAHRA AMINOLROAYA *(SHE/HER)*

https://zahramino.github.io/ — in https://www.linkedin.com/in/zahra-aminolroaya/ — https://github.com/Aminolroaya
@ z.aminolroaya@gmail.com — ♀ Calgary, Alberta, Canada

ABOUT ME

I aim to utilize my skills to make a positive and meaningful impact on people's lives and experiences.

EXPERIENCE

UCalgary Research Developer (Short-term Project)

HOPE Lab,Collaboration Centre

📅 March 2023 – Ongoing ♀ Calgary, Canada

- Designing and developing a conversational training system to avoid youth suicide using RNN-based speech-to-text models and NLP textual similarity algorithms for a user study with psychologists

UCalgary Data Scientist (Part-time)

Clinical Research Unit

📅 May 2019 – April 2023 ♀ Calgary, Canada

- Responsible for applying ML workflow for interpreting client satisfaction data using a BERT transformer model with an accuracy of 71% based on Jira service desk ticket data
- Creating predictive models, including Random Forest and non-linear SVM, for surgical outcomes, based on clinical notes with best performance of AUC ROC 0.88 (+/- 0.02 SD) and patient mortality based on patient's characteristics with AUC ROC 0.80 (+/- 0.06 SD)

UCalgary Research Assistant

SEER Lab

📅 January 2019 – April 2023 ♀ Calgary, Canada

- Developed a virtual reality epilepsy presurgical evaluation system as a team head resulted in four publications, qualitative positive feedback from neurologists, one job offer, and a presentation in the pediatric sEEG course

R & D Engineer

Dataak

📅 Dec 2017 – Nov 2018 ♀ Tehran, Iran

- Monitoring and management of big data for handling instant services' requests and NLP engineering using SolrCloud, SQL, the Airflow workflow management platform, and Grafana

Data Scientist

Dayche Data Mining Group

📅 Sep 2016 – Dec 2017 ♀ Tehran, Iran

- Utilizing NLP and ML techniques, such as K-means clustering, for a customer relationship management problem (CRM modeling), contributing to the release of the DaycheR platform, also applying pharmacy textual data integration and consulting a banking company based on ETL using SQL

INTERESTS

- Data Science & Analysis
- Natural Language Processing (NLP)
- Machine Learning Operations (MLOps)

MAIN STRENGTHS

- Data Science & Analysis

Supervised & Unsupervised Learning | Scikit-learn | TensorFlow | NumPy | Pandas | Tableau | MatplotLib | RShiny

- NLP

Sequence-to-sequence Modeling | Classification | Summarization | Name Entity Recognition | Generative Modeling | Hugging Face | spaCy | NLTK | Feature Engineering

- MLOps

AWS | SQL | Apache Airflow | Apache SolrCloud | Grafana | Apache Zookeeper for Cloud | REST API | Containerization

- Programming

Python | C# | R

- Collaborations

GitHub | Jira | Trello | Agile Development | MS Office

VOLUNTEERING

- Presenter of Canadian Pediatric sEEG Course
- UCalgary CS Vice-President Academic & CS Graduate student representative
- Mentor of Banff 2050 Project
- Consultant of a computer vision master project (UCalgary)
- Lecturer of a Social Network Analysis Seminar (SBU)

R & D Engineer

Cyber Space Research Center at Shahid Beheshti University (SBU)

📅 Aug 2015 – Sep 2016   📍 Tehran, Iran

- Developing a plagiarism detection platform using NLP techniques and ETL using trie-based data structure of Solr Cloud, and SQL (a top platform in PersianPlagDet 2016 competition)

EDUCATION

PhD. in Computer Science
University of Calgary

📅 January 2019 – April 2023

- Streamlining Epilepsy Surgery Planning Rounds with Virtual Reality
- A Healthcare Problem
- Supervisors: Frank Maurer, Ph.D and Samuel Wiebe, MD
- GPA 4/4

M.Sc. in Computer Science
University of Shahid Beheshti

📅 2014 – 2016   📍 Tehran, Iran

- Uncovering the Structure and Temporal Dynamics of Information Propagation
- A Data Science Problem
- Supervisor: Ali Katanforoush, Ph.D
- GPA 4/4

B.Sc. in Computer Science
University of Shahid Beheshti

📅 2010 – 2014   📍 Tehran, Iran

- GPA 4/4

CERTIFICATIONS

Analyze Datasets and Train ML Models using AutoML
Deeplearning.AI

📅 May 2023   📍 Online

- Practical Data Science on the AWS Cloud Specialization

The Data Scientist's Toolbox
Coursera

📅 March 2023   📍 Online

Machine Learning
Coursera

📅 Jan 2014   📍 Online

HONORS

Alberta Innovates Graduate Student Scholarships
University of Calgary

📅 2021   📍 Calgary, Canada

Awarded $31,000

Alberta Graduate Excellence Scholarship (AGES)-International students
University of Calgary

📅 2020   📍 Calgary, Canada

Awarded $15,000

Alberta Innovates Graduate Student Scholarships
University of Calgary

📅 2020   📍 Calgary, Canada

Awarded $18,000

Outstanding-student admission offer without taking entrance exam
Shahid Beheshti University

📅 2014   📍 Tehran, Iran

- Ranked 3rd among all graduates in the department class of 2016
- Ranked 3rd among all undergraduates in the department class of 2014

REFERENCES

Lennard Kuijten

Manager of Tech Solutions & Innovation

📍 Clinical Research Unit
@ lennard.kuijten@ucalgary.ca

Frank Maurer

Professor/ Supervisor of Computer Science

📍 UCalgary
@ fmaurer@ucalgary.ca