

ZAHRA AMINOLROAYA (SHE/HER)

Portfolio Webpage in LinkedIn Profile

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Calgary, Alberta, Canada

ABOUT ME

My life's passion is to positively impact living beings, with a focus on enhancing the quality of life and experiences of humans.

EXPERIENCE

UCalgary Research Staff (short-term Project)

HOPE Lab, Collaboration Centre

March 2023 – Ongoing

Calgary, Canada

- Developing and releasing a training system to avoid youth suicide using conversational AI and face recognition (to be used in a user study with psychologists)

UCalgary Data Scientist (Part-time)

Clinical Research Unit

May 2019 – April 2023

Calgary, Canada

- Responsible for evaluating and interpreting client satisfaction data using a BERT transformer model with an accuracy of 70% based on Jira service desk tickets
- Creating predictive models for surgical outcomes based on clinical notes with 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

- Specializing in the design and evaluation of augmented and virtual reality (AR/VR) systems and information visualization working with MRI & EEG data
- Developed a VR 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 text big data for handling instant services' requests and NLP engineering using SolrCloud, the Airflow workflow management platform, and Grafana

Data Scientist

Dayche Data Mining Group

Sep 2016 – Dec 2017

Tehran, Iran

- Utilizing NLP and ML techniques for a customer relationship management problem (CRM modeling), contributing to the release of the DaycheR platform, pharmacy data integration, and consulting a banking company

INTERESTS

Data Science NLP Data Engineering

Extended reality (AR/VR)

Human-computer Interaction

STRENGTHS

Programming

Python C# SQL R JAVA

WEB

REST API HTML / CSS Javascript

Platforms

AWS Gephi Apache Solr & SolrCloud

RedCap GitHub Unity Trello Jira

Tableau

Libraries

Hugging Face spaCy NLTK

PyTorch tensorflow transformers

scikit-learn NumPy Pandas

R Shiny Apache Lucene D3.js

Others

Social Network Analysis Git

Agile Development Apache Airflow

Grafana Linux Microsoft 365

VOLUNTEERING

- Presenter of Canadian Pediatric SEEG Course
- UCalgary CS Vice-President Academic
- UCalgary 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)
- Mentoring team members for familiarization with Data science (Clinical Research Unit)

R & D Engineer

Cyber Space Research Center at Shahid Beheshti University (SBU)

📅 Aug 2015 – Sep 2016

📍 Tehran, Iran

- Developing a person plagiarism detection platform using NLP techniques and trie-based data structure of Solr Cloud (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
- 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

- Thesis Topic: Uncovering the Structure and Temporal Dynamics of Information Propagation
- Supervisor: Ali Katanforoush, Ph.D
- GPA 4/4

B.Sc. in Computer Science

University of Shahid Beheshti

📅 2010 – 2014

📍 Tehran, Iran

- GPA 4/4

REFERENCES

Lennard Kuijten

Manager Tech Solutions & Innovation

📍 Clinical Research Unit

@ lennard.kuijten@ucalgary.ca

Frank Maurer

Professor/ supervisor of computer science

📍 UCalgary

@ fmaurer@ucalgary.ca

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