

# Amina Eltahir

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## EDUCATION

### UNIVERSITY OF ALBERTA

MENG IN ELECTRICAL & COMPUTER  
ENGINEERING

Apr 2021 | Edmonton, AB

### SUDAN UNIVERSITY OF SCIENCE & TECHNOLOGY

BENG IN ELECTRONICS

Dec 2017 | Khartoum, SU

## ACADEMIC RESEARCH

### GRADUATE

RECENT DEVELOPMENTS IN  
MULTI-AGENT PATH-FINDING

Research Literature Review.

### UNDERGRADUATE

DESIGN OF A CONTROL SYSTEM OF  
DIALYSIS MACHINES

Graduation thesis project.

## SKILLS

### SOFT SKILLS

communication | Creativity | Leader  
Attention to details | Growth mindset  
Critical thinking | Focus mastery

### TECHNICAL SKILLS

proficient with:

Python • C++ • C • Rust • Matlab  
Javascript • Bootstrap • HTML • CSS  
Agile • GIT • GIT • GitHub

Familiar:

Linux • SQLite • PostgreSQL

## INTERESTS

### PASSION

- Machine Learning • Heuristic Search
- Data Structures and Algorithms
- Cooking • Learning languages

### LANGUAGES

- Arabic (Native)
- English (Fluent IELTS Band 7)
- Korean (Fluent, Self Taught)
- Spanish (Ongoing)
- French (Next interest)

## WORK EXPERIENCE

### STEAM DRY CANADA | SALES ASSOCIATE

Jan 2020 - Apr 2020 | Alberta, Canada

- Achieved one of the highest lead generation rates in the region.

### GOLDEN SQUARE TECHNOLOGY | SALES & MARKETING ENGINEER

Nov 2018 - May 2019 | Khartoum, Sudan

- Demonstrated professional communication skills while participating in countless business meetings with local banks and Tech. Companies.
- Represented the company & its partners in local Exhibitions.

### SUDAN UNIVERSITY OF SCIENCE & TECHNOLOGY | TEACHING ASSISTANT

Dec 2017 - Nov 2018 | Khartoum, Sudan

Voted one of the best 3 Teaching Assistants by undergraduates in their 5<sup>th</sup> year.

Taught Laboratory courses including course curriculum preparation, organize reference materials, Grade examinations, term papers and laboratory reports.

- Computer Networks (Linux basics, Ubuntu).
- Micro-controller (BASCOM, ATmega series, Proteus Professional).
- Digital Image Processing (MATLAB).
- Microprocessor systems and Assembly language.

### SUDAN UNIVERSITY OF SCIENCE & TECHNOLOGY | TRANSLATOR

Aug 2017 - Sep 2017 | Khartoum, SU

- Technical Arabic to English documents translation and editing as part of the college of engineering's technical translation team for official documents.

## TECHNICAL PROJECTS

### GA-SCHEDULER | [GITHUB.COM/AMNA-A/GA-SCHEDULER](https://github.com/Amna-A/GA-Scheduler)

GA-Scheduler is a University timetable scheduler using Python3 where scheduling is done with Genetic Algorithms. Web Scrapping was performed to get the data from the University of Alberta website (fall 2020).

### ATAXX-AB | [GITHUB.COM/AMNA-A/AB-ATAXX](https://github.com/Amna-A/AB-Ataxx)

Ataxx-AB is a 2 player console game that is implemented using c++ with options for manual players or an automated player(AI) using an **alpha-beta pruning** search algorithm.

### SEARCH-TREES | [GITHUB.COM/ECE520-PROJECT/TREES](https://github.com/ECE520-PROJECT/TREES)

I worked with **Hao Li** and **Ke Fang** to create **Search-Trees**, a public rust crate that contains utilities for binary search tree, red-black tree, and AVL tree.

## VOLUNTEER EXPERIENCE

2021

**General Volunteer**

Student's Union, University of Alberta

2020

**Warehouse Volunteer**

Fresh Routes, Edmonton

2020

**Image Captioning Volunteer**

AirConLab, University of Alberta

2020

**Class Mentor**

U school, University of Alberta

2018

**Student Advisor**

Sudan University of Science and Tech.