

Sherif Sakran

3011251S@student.gla.ac.uk | +44 07596 788624 | linkedin/in/sherif-sakran | github/Sherif-Sakran

Education

The University of Glasgow (UofG), UK , MSc in Computing Science	Sept 2024 – Aug 2025
<ul style="list-style-type: none">• Current GPA: 19.25 (A4)• Research Interests: Natural Language Processing and Human-Computer Interaction• Awarded the African Excellence full scholarship award – 1 of 15 (out of 1237)	
The American University in Cairo (AUC), Egypt , BSc in Computer Engineering	Sept 2019 – June 2024
<ul style="list-style-type: none">• GPA: 3.845/4.0 (Highest Honors)• Double Minor in Mathematics and Business Administration	
The University of Edinburgh (UoE), UK , Study Abroad	Sept 2022 – Jan 2023
<ul style="list-style-type: none">• Coursework: Human-Computer Interaction, Computer Networks, Software Testing, and Bioinformatics	

Technical Experience

Reserach Intern in Deep Learning , AUC and Osaka University – online	June 2023 – Aug 2023
<ul style="list-style-type: none">• Researched and presented state-of-the-art models for indoor location tracking• Implemented a building-independent floor predictor and improved its performance in cross-building testing by up to 25% through hyperparameters fine-tuning and modifying the visual representation of the input data• Leveraged explainable AI (SHAP and LIME) to interpret indoor location predictions made by CNNs and XGBoost	
Undergraduate Teaching Assistant , AUC – Cairo, EG	Fall 2020 & Spring 2023
<ul style="list-style-type: none">• Held hidden labs to implement OOP concepts, data structures, and algorithms• Provided office hours to explain concepts to students and answer their questions• Assisted students with understanding their coursework and project requirements	
Software Development Engineering Intern , Siemens – Cairo, EG	Aug 2022 – Aug 2022
<ul style="list-style-type: none">• Used Jenkins to automate jobs on multiple machines by writing Bash and Python scripts• Implemented git hooks to automate certain tasks at pre-push using Bash and Python• Achieved 16% speedup for a testing tool through synchronisation	
Software Engineering Intern , AUC Digital Libraries – Cairo, EG	June 2022 – July 2022
<ul style="list-style-type: none">• Worked on a face recognition system to digitise the library's assets• Utilised the few-shot learning approach to train and recognise faces in a GUI tool developed in Python• (Project was presented as a library tool and shared with librarians at the MELA virtual conference (2022))	

Selected Projects

Text Classification for Museum Institutions, UofG Coursework	
<ul style="list-style-type: none">• Developed a multi-class text classification model using four transformer-based architectures.• Implemented data preprocessing techniques, including , tokenization, custom label mapping, and data collators.• Tools Used: Hugging Face's transformers and Trainer API	
E-Vehicle Share System, UofG Coursework Expansion	
<ul style="list-style-type: none">• Designed the database schema and developed the backend of the system to provide all the required APIs• Developing the front end of the system• Tools Used: Django, PostgreSQL, Postman, and React JS	
Video Conference Voice Recognition, Undergraduate Dissertation	Industry partner: Google
<ul style="list-style-type: none">• Reviewed state-of-the-art speaker identification approaches and datasets• Conducted a comparative evaluation between speaker-specific feature extraction techniques, levels of audio signal processing, and generative and discriminative machine learning models, including GMM, CNN, and SVM	

- Developed a real-time speaker identification desktop application and an audio dataset processing toolkit
- Tools Used: Tensorflow, SciKit learn

Virtual Building Approach for Floor Prediction, Internship

Osaka University (online)

- Implemented a building- and access point-independent floor predictor and used XAI for prediction explanations.
- Processed and augmented public WIFI and AP datasets to build a new dataset for the virtual building approach.
- Tools Used: TensorFlow, SciKit learn, OpenCV

Face Recognition, Internship

AUC Digital Libraries

- Developed a desktop GUI application that tags persons, recognises faces, and constructs metadata for photos.
- Designed a test suite and performed black- and white-box testing for recognition and metadata construction.
- Tools Used: Tkinter (Python GUI Package)

Languages and Technologies

Languages: C++, C, Python, Java, R, SQL, Verilog

Data Science: Pandas, NumPy, PyTorch, Hugging Face, TensorFlow, SciKit learn, OpenCV

Back-End: Django, PostgreSQL

Front-End: HTML, CSS, JavaScript, React JS

Extracurricular Activities and Experience

President, Resala AUC

Spring 2024

- Led a team of 14 heads and directors to reshape Resala's image
- Partnered with Shabab El-Geel NGO in El-Deweiga to re-establish Resala's main mandate
- Connected Resala AUC with Resala NGO and secured a donations account for Resala AUC
- Organised and led a Ramadan packs event and prepared 600 packs for families in need
- Led a fundraising campaign of 51K LE through nine partnerships and 25K LE donations
- Hosted a blood drive on campus and obtained 96 blood donation bags
- Collaborated with a scouting team on a trip to entertain members and promote our Orphans Day
- Organised an Orphans Day and distributed food, clothes, and toys for 36 children
- Coordinated external visits to Resala NGO for assistance with medical supplies
- Developed Resala's website (resala-auc.github.io/spring24/) to showcase our achievements and attract volunteers

External Affairs Director, Sabeel Foundation, AUC

Spring 2021 - Fall 2021

- Designed posters using Photoshop and moderated Sabeel's social media accounts
- Led 23 members to execute marketing campaigns for member recruitment and the Open Discussion Project
- Coordinated opening and closing ceremonies

Internal Development Member, Entrepreneurs' Society, AUC

Fall 2021

- Co-moderated the Junior Startup Competition for +100 high school students
- Designed certificates of recognition for the active participants of the competition
- Proposed a plan for training members on public speaking, leadership, and time management

Awards and Honors

AUC student organisations Progress Award (Resala), AUC

May 2024

AUC student organisations Best Collaboration Award (Resala), AUC

May 2024

Erasmus+ Award for Study Abroad, UoE

Fall 2022

Empower Full Merit Scholarship at AUC

Fall 2019 – Spring 2024

Top 10 in Math Section in Thanawya Amma in Fayoum

July 2019

National Finalist in Environmental Engineering, Intel ISEF

March 2019

First Place in the I Am an Explorer students competition, Fayoum

April 2018