# Mohammad Zeineldeen

□ +49 16 31638286 • ☑ mohammadzed5@gmail.com • ☑ mmz33.github.io Date of Birth: 18 Nov. 1995

## **Education**

**RWTH Aachen University** 

Aachen, Germany

Masters in Software Systems Engineering

Winter 2017 - Winter 2019

Grade: 1.4/1.0 (very good)

American University of Beirut

Beirut, Lebanon

Bachelor of Science in Computer Science awarded with Distinction

Fall 2014 - Spring 2017

Grade: 3.7/4.0

## **Research Interests**

recurrent networks, LSTMs, end-to-end models, neural attention models, automatic speech recognition (ASR), natural language processing (NLP)

#### **Publications**

o M. Zeineldeen, A. Zeyer, R. Schlüter, and H. Ney. Layer-normalized LSTM for Hybrid-HMM and End-to-End ASR. In IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Barcelona, Spain, May 2020. To appear.

## **Experience**

#### Speech Scientist - AppTek GmbH · Part-time

**Aachen, Germany** *Jan. 2020 - Current* 

o Building robust ASR systems for different languages

Aachen, Germany

**Student Research Assistant - ASR team at RWTH Aachen** o Implemented various layer normalized LSTM variants using TensorFlow

July 2018 - Dec. 2019

- o Investigated Multiplicative LSTMs
- o Built both hybrid and encoder-decoder attention frameworks for ASR acoustic modeling
- o Built neural language models with word/BPE output labels

### Software Developer at InteractiveLife

Beirut, Lebanon

o Development and maintinance of an Android SDK

June 2018 - Sept. 2018

- o Refactored the code base network framework to use Google's Volley library
- o Automated the process of creating apps (connected to web API to specify the content like design, colors, etc) and uploading apks to the store

#### Future Developer Summer Camp - AUB

Beirut, Lebanon

Participated as a main instructor in preparing the slides for a beginner Android course and teaching it for school students

July 2018

## **Projects**

Imgs Beirut, Lebanon

Imgs is an android mobile image search app that uses Deep Learning to allow users to search for images related to a specified english query in their gallery

Feb. 2017 - May 2017

#### **Deep Learning Related Code**

Source Code: https://mmz33.github.io/code/

#### CustomVolleyRequester

Beirut, Lebanon

2017

A library, based on Google's Volley library, that makes android HTTP requests easier and requires no boiler plate code that volley usually needs

Source Code: https://github.com/mmz33/CustomVolleyRequester

## Hopln Beirut, Lebanon

Developed an Android carpooling application on a team for a Software Engineering course Source Code: https://github.com/mmz33/HopIn

Feb. 2016 - May 2016

## **Scholarships and Certificates**

**USAID Scholarship** 

Awarded full scholarship to study BSc. in Computer Science at

the American University of Beirut

ACM - Lebanese Collegiate Programming Contest (LCPC)

Won the 1st place (Team: 1729)

American University of Beirut

Placed three times on the Dean's Honor List

**Darwazah Student Innovation Contest** 

Won 1st runner up award in 2017 Darwazah Student Innovation Contest. The idea was to compute the number of calories of food given as input an image using Deep Learning.

**Computer Skills** 

Basic Knowledge: CUDA, C, Postgresql, Html, Bootstrap

Intermediate Knowledge: C++11, Java, Python, TensorFlow, Android Development, LATEX, Git, SQL, Vim, Bash

## Volunteering

#### AUB - Center of Civic Engagement and Community Service (CCECS)

Fall 2013 - Spring 2017

Beirut, Lebanon

Beirut, Lebanon

Beirut, Lebanon

Beirut, Lebanon Fall 2014 - Spring 2017

Beirut, Lebanon

March 2017 - May 2017

2016

Fall 2013 - Spring 2017

- o Implemented a community based project under the theme of using "Art therapy" to tackle the increase of negative coping mechanisms among children in poor neighbourhoods in Beirut and its surroundings
- o Volunteered in teaching Palestinian students math skills for the SAT exams at AUB
- o Participated in sorting clothes to be delivered to Syrian refugees
- o Worked with D-RASSATI program in collecting data from Lebanese official schools in order to integrate technology in the educational field
- Volunteered with Nasma organization in helping students that have disabilities with their school studies

# Languages

English: Fluent

German: Fair (Level A)

Arabic: Native