# Mohammad Zeineldeen

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Date of Birth: 18 Nov. 1995

## Education

**RWTH Aachen University**                                                                    **Aachen, Germany**
*Ph.D. in Computer Science*                                                                   *Winter 2020 - Current*

**RWTH Aachen University**                                                                    **Aachen, Germany**
*Masters in Software Systems Engineering*                                            *Winter 2017 - Winter 2019*
Master thesis: Layer Normalization Variants and Multiplicative LSTMs
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

○ *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**
○ Building robust ASR systems for different languages                               *Jan. 2020 - Current*

**Student Research Assistant - ASR team at RWTH Aachen**                    **Aachen, Germany**
○ Implemented various layer normalized LSTM variants using TensorFlow       *July 2018 - Dec. 2019*
○ Investigated Multiplicative LSTMs
○ Built both hybrid and encoder-decoder attention frameworks for ASR acoustic modeling
○ Built neural language models with word/BPE output labels

**Software Developer at InteractiveLife**                                               **Beirut, Lebanon**
○ Development and maintinance of an Android SDK                                   *June 2018 - Sept. 2018*
○ Refactored the code base network framework to use Google's Volley library
○ 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     *July 2018*
and teaching it for school students

## Projects

**Imgs**                                                                                              **Beirut, Lebanon**
Imgs is an android mobile image search app that uses Deep Learning to allow users     *Feb. 2017 - May 2017*
to search for images related to a specified english query in their gallery

**Deep Learning Related Code**
Source Code: https://mmz33.github.io/code/

**CustomVolleyRequester**                                                                     **Beirut, Lebanon**
A library, based on Google's Volley library, that makes android HTTP requests easier           *2017*
and requires no boiler plate code that volley usually needs
Source Code: https://github.com/mmz33/CustomVolleyRequester

**HopIn**                                                    **Beirut, Lebanon**
Developed an Android carpooling application on a team for a Software Engineering course   *Feb. 2016 - May 2016*
Source Code: https://github.com/mmz33/HopIn

## Scholarships and Certificates

### USAID Scholarship
**Beirut, Lebanon**
Awarded full scholarship to study BSc. in Computer Science at            *Fall 2013 - Spring 2017*
the American University of Beirut

### ACM - Lebanese Collegiate Programming Contest (LCPC)
**Beirut, Lebanon**
Won the 1st place (Team: 1729)                                                       *2016*

### American University of Beirut
**Beirut, Lebanon**
Placed three times on the Dean's Honor List                              *Fall 2014 - Spring 2017*

### Darwazah Student Innovation Contest
**Beirut, Lebanon**
Won 1st runner up award in 2017 Darwazah Student Innovation Contest.       *March 2017 - May 2017*
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)
**Beirut, Lebanon**
o Implemented a community based project under the theme of using "Art therapy" to    *Fall 2013 - Spring 2017*
  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
o Volunteered with Nasma organization in helping students that have disabilities with
  their school studies

## Languages

English: Fluent
German: Fair (Level A)
 Arabic: Native