

# RAMZI HADDAD

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## EDUCATION

### American University of Beirut

BE Mechanical Engineering with distinction *GPA: 3.6/4.0*

Beirut, Lebanon

Sep 2016 - May 2020

## WORK EXPERIENCE

### HiveMate

*Cofounder*

Beirut, Lebanon

May 2020 - Present

- Developed and productionized an intelligent device monitoring bee hives using artificial intelligence
- Secured 1st place and a \$20,000 investment from the AUB Accelerator Program

### Center for Collision Safety and Analysis, George Mason University

*Research Intern*

Fairfax, VA

June 2019 - Aug 2019

- Found and analyzed comparison metrics for short duration frontal crashes based on sensory data from NHTSA
- Helped in modeling a Volkswagen Passat for crash simulations

## SKILLS

Programming Languages:	Java, C++, Python, JavaScript, HTML, CSS, MATLAB
Software:	LabVIEW, AutoCAD, SolidWorks, Altair HyperWorks, LaTeX
Libraries:	PyTorch, TensorFlow, pandas, NumPy, Matplotlib, OpenCV, Keras, Scikit-Learn
Topics:	Data structures, Algorithms, OOP, IoT, AWS, REST API, Django, Convex Programming
Hardware:	Raspberry Pi, Arduino, ESP32
Operating Systems:	Linux, Windows
Languages:	English, Arabic, French

## PROJECTS

### Semantics in Deep Learning

Knowledge graph construction for reasoning in neural networks

### Sentiment Analysis Using Neural Networks

Offensive tweet detection in Arabic using RNNs and BERT

### NBA Predictive Model Using Deep Learning

Predicting future NBA stars using selective metrics

### Object Tracking using Computer Vision

Tracking objects using OpenCV and HSV color space

### IoT Communication with ESP32

Communication with ESP32 to upload photos to AWS S3

### IoT Communication with Raspberry Pi

Communication with Raspberry Pi using REST API

### Stabilizing Quanser 3DOF Hover Quadcopter

Controlling quadcopter via LQR and adaptive controllers using MATLAB & Simulink

### Radar System

Radar system using Arduino Uno and LabVIEW via serial commands

## INTERESTS

Artificial intelligence, machine learning, NLP, software development, optimization, control theory, data analytics, chess, soccer, swimming