

# RAMZI HADDAD

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## EDUCATION

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### Northeastern University

MS Computer Science *GPA: 4.0/4.0*

Boston, MA, USA

September 2021 - May 2023

### American University of Beirut

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

Beirut, Lebanon

Sep 2016 - May 2020

## WORK EXPERIENCE

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### Amazon Web Services

*Software Developer Intern, AWS IoT RoboRunner*

Boston, MA

June 2022 - August 2022

- Developed a data streaming service enabling customers to view robot data with low latency
- Produced a proof of concept feature to allow video streaming from robots in near real time

### Khoury College of Computer Sciences, Northeastern University

*Teaching Assistant for MISM 6212: Data Mining & Machine Learning*

Boston, MA

January 2022 - May 2022

- Held office hours to help out students with key concepts and Python programming assignments
- Graded weekly assignments for 20+ students

### Murex

*Software Developer Intern*

Beirut, Lebanon

April 2021 - June 2021

- Enhanced front end features for internal financial platform for better user experience
- Developed an inventory REST service using Spring Boot with 15% performance improvement

### HiveMate

*Cofounder*

Beirut, Lebanon

May 2020 - March 2021

- 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

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

## SKILLS

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

## PROJECTS

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### Pac-Man AI

Applying search and RL techniques to the Pac-Man video game using Python

### Maze Game

An action maze chase game using the MVC pattern in Java

### Football Stats Site

Displaying football stats through a website using React.js frontend and Node.js backend and a SQL database on AWS RDS

### 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

### Stabilizing Quanser 3DOF Hover Quadcopter

Controlling quadcopter via LQR and adaptive controllers using MATLAB & Simulink

## INTERESTS

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Internet of Things, Machine Learning, Natural Language Processing, Software Development, Optimization, Control Theory, Data Analytics, Chess, Soccer, Swimming