Diala Lteif
– Boston, MA 02215

✉ dlteif@bu.edu   •   🌐 cs-people.bu.edu/dlteif/

Research Interests

Efficient Machine Learning, Deep Learning, Computer Vision, Explainable AI.

Education

Boston University	**Boston, Massachusetts, USA**
Ph.D. in Computer Science, GPA: 3.80/4.00	*Sept 2019 – Present*
American University of Beirut	**Beirut, Lebanon**
BSc in Computer Science with distinction, major GPA: 4.00/4.00	*May 2019*

Honors and Awards

Grace Hopper Celebration Conference Award, Boston University	*2020*
Dean's Honor List, American University of Beirut	*2016-2019*
First Place Winning Team in the ACM Lebanese Collegiate Programming Contest 2017, Beirut, Lebanon	*2017*
Fifth place winning team over Lebanon in the IEEExtreme Programming Competition	*2017*

Research Experience

Boston University	**Boston, Massachusetts, USA**
Research fellow, with Profs. Bryan Plummer, Sarah Adel Bargal, and Vijaya Kolachalama	*Summer 2021 – Present*

Working on explainability for tackling bias in medical imaging

Boston University	**Boston, Massachusetts, USA**
Research fellow, with Prof. Bryan Plummer	*2020 – Present*

Working on cross-layer parameter sharing for knowledge transfer and resource-efficient on-device machine learning

Boston University	**Boston, Massachusetts, USA**
Research fellow, with Prof. Sarah Adel Bargal	*2020 – Present*

Working on spatiotemporal visualizations for explaining deep video classification models.

Industry Experience

PinPay SAL, Beirut Digital District	**Beirut, Lebanon**
Intern	*Aug 2018 – Sept 2018*

Worked on Amazon Alexa, Google Assistant services and front-end web development

Teaching Experience

Boston University	**Boston, Massachusetts, USA**
Teaching fellow	*AY 2019-2020, 2021-2022*

- CS542: Machine Learning (Fall 2021)
- CS330: Introduction to Algorithms (Spring 2020)
- CS103: Introduction to Internet Technologies and Web Programming (Fall 2019)

Future Developer Summer Camp, American University of Beirut	**Beirut, Lebanon**
Instructor	*July 2018*

Taught Unity and iOS development to students between the ages 12 and 18

S.A.S Tutoring Center	**Beirut, Lebanon**
Instructor	*Feb 2017 – May 2017*

Taught high-school level Biology, Chemistry, and Physics classes

Selected Graduate Coursework

CS585: Image and Video Computing

CS542: Machine Learning

CS640: Artificial Intelligence

CS535: Complexity Theory

CS552: Operating Systems

CS511: Formal Methods

Projects

Boston University

CS585 Final Project: Image Deblurring Applied to Recycling Data 2021

Applied and evaluated existing classical and deep learning deblurring methods to a video of recycling trash moving on a conveyer belt.

Boston University

CS542 Final Project: Image Classification on Covid-19 X-rays 2020

Implemented binary and multi-class classification using VGG and ResNet backbone architectures in Keras on a Covid-19 X-ray dataset.

Boston Unversity

CS640 Final Project: Facial Expression Analysis Based on Videos of Presidential Candidates 2019

Worked with classmates to extend existing state-of-the-art deep convolutional neural networks for sentiment analysis on video clips of the 2020 Democratic Presidential candidates.

American University of Beirut

Undergraduate Final Year Project: Emotion Recognition in an Uncontrolled Environment 2019

Created an Android Application that predicted users' emotional state based on collected readings from ShimmerV3 Biophysical sensors and user self-assessment (in collaboration with the Psychiatry Department at AUBMC)

Skills

Languages

Python, Java, C#, C/ C++, Matlab, Javascript, SQL

Relevant Tools

Tensorflow, Keras, PyTorch, tensorboard, wandb.ai

Professional Activities

BU AI4ALL Program **Boston, Massachusetts, USA**

Guest Speaker *August 2021*

Gave a talk to high school students about Deep Learning and Explainable AI

BU ACM-W student chapter, Boston University **Boston, Massachusetts, USA**

Graduate Student Advisor *FY 2020-21*

coordinate the mentorship program and advocate for full engagement of women in computing and technology

Club of Artificial Intelligence, American University of Beirut **Beirut, Lebanon**

Treasurer *Nov 2017 – May 2018*

a club that revolves around Artificial Intelligence, Machine Learning, and Data Mining

ACM Arab Collegiate Programming Competition 2017 **Egypt**

Contestant *Nov 2017*

Competed and teamed with fellow AUB students in the 9th Arab Collegiate Programming Competition and ended up in the 31st place in the MENA region out of 104 participating teams

References

Available upon request.