FATIMA GHADIEH

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EDUCATION

American University of Beirut (AUB)   **September 2019**
B.E. in Electrical & Computer Engineering   CGPA: 4.0 - Dean's Honor List
Focus in Machine Learning, Robotics, & Control Systems. Minor in Economics

EXPERIENCE

Final Year Project, AUB   **September - Present, 2022**
HMI & Shared Control for Autonomous Vehicles
- Analyzing HMI-related literature and standards to develop efficient display interfaces that improve control handover between a vehicle and the driver.
- Using CARLA simulator to compile a dataset for a stop & go scenario to train a driver intention recognition model.
- Developing, testing, and validating a CNN and an LSTM model while also working on additional driver intention recognition features.

Adaptive Systems Laboratory, EPFL   **July - September, 2022**
E3 Research Intern (2% admission rate)
- Joined the ASL lab at EPFL as part of its *Excellence in Engineering Fellowship Program.*
- Worked on a project involving Multi-Agent Reinforcement Learning within POMDPs.
- Developed a paper which was submitted for publication.

Undergraduate Research Volunteer Program, AUB   **September 2021 - May, 2022**
Research Volunteer
- Assisted final year students on their final year project which uses data from social media platforms to detect offensive gender-based language using NLP methods.
- Built a web parsing tool to collect data and helped in preprocessing.

Al Ghurair Hub in Digital Learning, AUB   **January - December, 2022**
Data Analyst
- Tracked data regarding the performance of 150+ students taking EECE 230X "Introduction to Computation and Programming" that was being offered for the first time in a mixed-learning format.
- Managed and coordinated with a team of 14 coding coaches who were conducting office hours and labs.
- Performed extensive statistical analysis and prepared bi/weekly reports regarding course performance.

PUBLICATIONS

Kayaalp, M., **Ghadieh, F.**, & Sayed, Ali H., "Policy Evaluation in Decentralized POMDPs with Belief Sharing", *IEEE Open Journal for Control Systems*, 2023. DOI: 10.48550/arXiv.2302.04151

PROJECTS

- Controller for the AUB Autonomous Ground Vehicle
- AUBot: A Chatbot for AUB students FAQs

ACHIEVEMENTS

- LEBNet EIC Scholarship Recipient, *LEBNet*
- MEPI-TLS Gender Scholarship Recipient, *United States Middle East Partnership Initiative*

EXTRACURRICULAR ACTIVITIES

Digital Outreach Volunteer   **June - December, 2021**
Assisted in the preparation of a cutting-edge online certification program in Computer Science that makes coding more accessible in the Arab World.