

Adrian Meza

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Education

Massachusetts Institute of Technology (MIT)

Cambridge, MA

Candidate for Bachelor of Science in Physics

Aug 2016 – Dec 2021

Candidate for Bachelor of Engineering in Electrical Engineering & Computer Science

Relevant Coursework: Advances in Computer Vision, Deep Learning Practicum, Fundamentals of Programing, Introduction to Computational Thinking and Data Science, Discrete Applied Mathematics, Computation Structures
GPA: 4.4/5.0

Experience

MIT Computer Science and Artificial Intelligence Lab - Cybersecurity Group

Cambridge, MA

Undergraduate Researcher

May 2018 - Present

- Learned the most common memory unsafe exploits for low level computer programs through open-source cybersecurity exercises.
- Worked on an AI attack planning graph to analyze computer programs for vulnerabilities and map out possible attack routes.

MIT Center for Theoretical Physics

Cambridge, MA

Dark Matter - Undergraduate Researcher

Feb 2018 – May 2018

- Utilized a custom python library to create mock data to simulate potential sources of dark matter around or in the galactic center excess.
- Worked to use machine learning to scan Kepler telescope data for potential sources of dark matter, using the simulated data as a training set

NASA Jet Propulsion Laboratory

Pasadena, CA

Applied Electromagnetics Lab

May 2017- Aug 2017

- Implemented a custom simulation using Matlab to optimize the amount of power we could collect at an Avalanche Photodiode Sensor (APD) from light coming in at various angles and to achieve a greater Signal to Noise Ratio.

Space Sciences Division

May 2017- Aug 2017

- Analyzed possible novel methods for detecting Exoplanets in Extrasolar systems through modulations in Radio Frequency Emissions.
- Used Fourier Analysis to test numerous scenarios that we could see upon observation of an Extrasolar system.

MIT Motorsports/Formula SAE Team

Cambridge, MA

Electric Engineering Division

Aug 2016 – Dec 2016

- Designed and implemented printed circuit boards, using Altium, to implement safety systems for an electric motorsports vehicle.
- Designed the dashboard of the car to take in warning signals from the Battery Management System and notifying the driver.

Leadership

MIT Physics Department

Cambridge, MA

Committee Member

Jan 2018 - Present

- Collaborated with MIT Physics Department and a few other Undergraduates to organize a Physics Values Statement. It outlines our commitment to ensuring well-being, respect, inclusion, collaboration, and mentorship are imperatives in our interactions as students & faculty.

City of Children Orphanage Backpack/School Supplies Drive

Ensenada, Mexico

Founder

Aug 2013 - Present

- Developed and manage a fundraising drive aimed at purchasing school supplies (backpacks, shoes, school utilities, etc.) for approximately 86 kids (ages K-12); delivered every year before the school year starts.

Skills

- Languages: Python, C/C++, Matlab, JavaScript, HTML/CSS, Assembly, RUST
- Libraries: PyTorch, TensorFlow
- Fluent in Spanish and English (read, write, speak); knowledgeable in Japanese (read, short conversation)