ANTHONY BAEZ

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EDUCATION

Massachusetts Institute of Technology (MIT)

2021 - 2025

Bachelor of Science, Major in Artificial Intelligence and Decision Making Cambridge, MA

- **GPA:** 4.7/5.0
- Machine Learning Coursework: Introduction to Machine Learning; Representation, Inference, and Reasoning in AI; Advances in Computer Vision; Quantitative Methods for Natural Language Processing

Programming Coursework: Fundamentals of Programming; Introduction to Algorithms **Math Coursework:** Linear Algebra and Optimization; Probability and Random Variables

RESEARCH

Research Laboratory of Electronics - *Advanced Undergraduate Researcher*

Sept 2023 - Present

- Selected for 2023-2024 SuperUROP scholars cohort
- Enforcing Conservation with Projection in a Physics-Informed Neural Network
- Supervised by Prof. Luca Daniel

TALN, Universitat Pompeu Fabra - Undergraduate Researcher

June 2023 - Aug 2023

- Worked in Barcelona, Spain as part of MIT's global experiences program
- Fine-tuned LLaMA on a lexical simplification task to create LSLlama, a novel lexical simplification model that performed comparably to previous benchmarks while using significantly less compute
- Principal author on paper accepted to Second Workshop on Text Simplification, Accessibility and Readability (TSAR 2023) and published in ACL Proceedings

Lab for Computational Physiology, MIT - *Undergraduate Researcher*

June 2022 - Aug 2022

- Applied contrastive learning techniques to different classes of machine learning models to improve detection of cardiac arrhythmia for use in bedside monitors
- Adapted model to different ECG waveform datasets, conducted dataset and error analysis to improve models

WORK EXPERIENCE

DeepAI - *Machine Learning Research Intern*

June 2024 - Aug 2024

- Created Distributask, Python package for distributed rendering
- Worked to fine-tune open source text-to-video model on mixed real-synthetic dataset to improve spatial understanding

MIT Department of EECS - *Intro to Machine Learning Lab Assistant*

Spring 2023, Spring 2024

- Led students in weekly discussion of lab that applied and assessed their understanding of lecture content
- Assisted students with homework during office hours

TECHNICAL SKILLS

- Languages: Python, Julia, HTML/CSS, Javascript/Typescript
- Packages: PyTorch, TensorFlow, React, NumPy
- Other: Linux, Git, Docker

PUBLICATIONS

 Baez, A., & Saggion, H. (2023). LSLlama: Fine-Tuned LLaMA for Lexical Simplification. In Proceedings of the Second Workshop on Text Simplification, Accessibility, and Readability (pp. 102-108). Association for Computational Linguistics.