

Timothy H. Kostolansky

timkosto@mit.edu | (925) 322-9966

Education

Massachusetts Institute of Technology	<i>Cambridge, MA</i>
Master of Engineering in Computer Science and Engineering	<i>May 2024</i>
Bachelor of Science in Computer Science and Engineering	<i>May 2023</i>
Bachelor of Science in Physics	<i>May 2023</i>

Relevant Coursework: Statistical Inference, Natural Language Processing, Robotics (Automation, Control, Probabilistic Decision Making), Quantum Physics, Relativity, Statistical Physics

Work and Research Experience

MIT Picower Institute for Learning and Memory	<i>September 2022 – Present</i>
<i>Undergraduate researcher for lab led by Mark Bear that develops novel treatments for brain disease</i>	
<ul style="list-style-type: none">Developing and testing of convolutional neural network architecture with self-connectivity, mimicking the behavior of cell-to-cell connection that is present in the physical structures of the brainNeural network implemented in PyTorch	
Second Spectrum Incorporated	<i>June – August 2022</i>
<i>Software engineer for sports data company that uses computer vision to track athletes in game film</i>	
<ul style="list-style-type: none">Upgraded and refactored video data pipelines from professional sports streams to company's S3 serversUsed Temporal.io to protect from failure over long-running video protocols	
MIT Laser Interferometer Gravitational Wave Observatory (LIGO)	<i>February 2021 – August 2021</i>
<ul style="list-style-type: none">Updated prototype designs for the Fast Shutter System (protects high-sensitivity measuring equipment)Use of numerical physics simulation with Mathematica and hands-on work with designing and building shutter prototype	

Activities and Leadership Experience

MIT Science Policy Review	<i>April 2021 – Present</i>
<i>Technology director for policy journal that publishes science policy reviews authored by members of the MIT community</i>	
<ul style="list-style-type: none">Maintaining and updating Review's website, uploading articles and covers	
MIT Varsity Basketball	<i>September 2019 – March 2022</i>
<i>NCAA Division III athlete, competed with full course load, two-time NEWMAC Academic All-Conference selection</i>	
Japanese National Basketball Team	<i>June 2019 – August 2019</i>
<i>Trained at Ajinomoto National Training Center, competed in 2019 William Jones Cup (Taiwan, bronze medal)</i>	

Skills

Programming: Python 3, PyTorch, ROS, Julia, MATLAB, Mathematica, TypeScript
Language: English, Japanese (proficient)
Interests: chess, basketball, ortholinear keyboards, meditation