

# Timothy H. Kostolansky

timkosto at mit dot edu | [tim0120.github.io](https://tim0120.github.io)

## Education

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<b>Massachusetts Institute of Technology</b>	<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:** Machine Learning, Deep Learning, Reinforcement Learning, Statistical Inference, Natural Language Processing, Algorithms, Robotics (Manipulation, Task and Motion Planning), Quantum Physics, Relativity, Statistical Physics

## Work and Research Experience

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**MIT CSAIL, Algorithmic Alignment Group** *July 2023 – Present*  
*Graduate researcher for AI alignment lab led by Dylan Hadfield-Menell*

- Developing and testing methods to extract the rules governing preference datasets
- In progress

**MIT Picower Institute for Learning and Memory, Bear Lab** *September 2022 – April 2023*  
*Undergraduate researcher for lab led by Mark Bear that develops novel treatments for brain disease*

- Developing and testing convolutional neural network architecture with self-connectivity, mimicking the behavior of cell-to-cell connection that is present in the physical structures of the brain

**Second Spectrum Incorporated** *June – August 2022*  
*Software engineer for a sports data company that uses computer vision to track athletes in game film*

- Upgraded and refactored video data pipelines from professional sports streams to the company's S3 servers
- Used Temporal.io to protect from failure over long-running protocols

**MIT Laser Interferometer Gravitational Wave Observatory (LIGO)** *February 2021 – August 2021*

- 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

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**MIT Science Policy Review** *April 2021 – September 2023*  
Technology director for a policy journal that publishes science policy reviews authored by members of the MIT community

- Maintaining and updating the Review's website, uploading articles and covers

**MIT Varsity Basketball** *September 2019 – March 2022*  
NCAA Division III athlete, competed with full course load, two-time NEWMAC Academic All-Conference selection

**Japanese National Basketball Team** *June 2019 – August 2019*

- Selected for National Team and trained at Ajinomoto National Training Center in Tokyo
- Competed in the 2019 William Jones Cup in Taiwan, earned bronze medal

## Skills

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**Programming:** Python 3, PyTorch, ROS, Julia, MATLAB, Mathematica, TypeScript

**Language:** English, Japanese (proficient), Italian (learner)

**Interests:** chess, meditation, basketball, ortholinear keyboards