# KENNETH COX

thekenster1729.github.io \$\digktriangle \kappacox \kappacox 1729@mit.edu

#### **EDUCATION**

## Massachusetts Institute of Technology

S.B. in Mathematics, General and Biology

# August 2018 - Present

GPA: 4.8/5.0

### CAREER OBJECTIVE

To solve real-world problems by integrating an understanding of human institutions and decision-making with a rigorous data-driven methodology.

#### **PROJECTS**

# DNA Repair via Homologous Recombination in S. Pombe

June 2017 - August 2018

Worked as a research intern at the Yale University School of Medicine, in the lab of Megan King investigating the components of homologous recombination DNA repair in *S. pombe* yeast cells. Research pending publication under the title "Homology-directed repair involves multiple strand invasion cycles in fission yeast".

# **Academic Projects**

Spring 2020

Merits of an Age-Compartmentalized SIR Model In Predicting Healthcare Burden From COVID-19 In Suffolk County, MA: Built a model to predict COVID-19 burden in Suffolk County, Massachusetts. Markov Melodies: Worked with a classmate to create randomly-generated music via Markov chains.

# EPPA Model Data Analysis

January 2021 - Present

Currently working as an undergraduate research assistant on a project that analyzes data from the Emissions Prediction and Policy Analysis (EPPA) model to identify key drivers of renewable energy adoption in 2050.

### TECHNICAL STRENGTHS

Modeling and Analysis

Python

Software & Tools

MS Office, Latex, Audacity

### **EXTRA-CIRRUCULAR**

# Head Project Mentor, Leadership Training Institute (2020 - 2021)

LTI is a leadership and project development program hosted by MIT students for local high school students; as head PM, I re-designed the project development-focused curriculum.

# Mentor, PRIMES Circle (Spring 2020)

Oversaw two high school students who were self-studying knot theory. With my guidance, the students wrote and presented a final paper.

### Teaching Assistant, Differential Equations (Spring 2020)

Assisted a professor with instruction and grading for differential equations in the Spring 2020 semester.

## Undergraduate Association Committee on COVID-19 (July 2020 - May 2021)

The Committee provided student feedback and support to administrators on COVID-19 related issues.

# **Educational Studies Program**

Taught multiple one-day and multi-week classes to local middle and high school students; course material ranged from epidemiology to psychology.