

JACK LEIGHTCAP

[@jack@leightcap.com](mailto:jack@leightcap.com) · github.com/jleightcap · jack.leightcap.com · [linkedin.com/in/jleightcap](https://www.linkedin.com/in/jleightcap)

EDUCATION

Northeastern University Boston, MA

August 2018 - May 2023

BSEE Electrical Engineering and Physics, *GPA*: 4.0

Dean's List all semesters · Lawrence Award, highest GPA in year (physics department)

Relevant Courses

Circuits and Signals: Biomedical Applications	EECE	2150	Embedded Design: Enabling Robotics	EECE	2160
Fundamentals of Programming II	CS	2510	Fundamentals of Networks	EECE	2540
Modern Physics	PHYS	2303	Calculus III	MATH	2321
Differential Equations and Linear Algebra	MATH	2341	Cornerstone of Engineering II	GE	1502

Cambridge University Cambridge, United Kingdom

July 2019 - August 2019

Pembroke-King's Summer Programme: History of Modern Middle East, Shakespearean Drama

Young Global Leaders Scholarship · Northeastern GEO Grant

Abington Heights High School Clarks Summit, PA

2014 - 2018

High School Diploma, *GPA*: 4.0

Mathematics Award · AP Scholar with Distinction · PLTW+AP Award · Symphony, Chamber, Honors Orchestra

EXPERIENCE

Just some small hometown jobs as of now.

PROJECTS

Classical Scores Project

2017 - Present

- Request-based YouTube channel dedicated to sharing synced scores and recordings of obscure or underappreciated classical music. Grew channel to 2 million total views, 6 thousand subscribers, and 20 years of watch time in one year.
- Automation of video editing includes image manipulation in Python using Knuth-Plass Line Wrapping Algorithm applied to sheet music, and scripting Adobe Photoshop/Premiere.
- Backlog of videos produced into 2022 with automated release scheduling.

ACTIVITIES

Avant-Garde Piano Series

2017 - Present

- Recorded Erik Satie's *Vexations* (1894). Longest recorded solo marathon piano performance, uninterrupted 34-hour recording. Live-streamed performance using Open Broadcaster Software and ffmpeg.
- Additional recordings include works by Antheil, Cage, Ives, and Rorem.

MBTA Speedrun

2019

- Used brute-force Travelling Salesman approach to determine the shortest possible path which visits all stops of the MBTA Green Line.
- Personal best time of 3:15.

SKILLS

Software

- Proficient: Microsoft Office Suite, Autodesk Inventor, L^AT_EX, Adobe Premiere, Adobe Photoshop
- Familiar: SolidWorks, AutoCAD

Programming

- Proficient: Python, MATLAB
- Familiar: C++, Wolfram Mathematica, Racket

Miscellaneous

Piano, Viola, Origami