# Jacob Spence

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### Education

#### **Carnegie Mellon University**

Bachelor of Science in Logic & Computation

May 2020

Selected Courses: Computer Systems, Digital Architecture, Software Construction, Statistics, Probability, Machine Learning, Formal Logic, Theoretical Comp Sci

# Experience

#### **Maven Machines**

Software Intern Summer 2018

Worked alongside full-time engineers developing management technologies for trucking companies. Designed, coded, and shipped several quality of life improvements to their android app. Acquainted myself with agile, scrum, and life at a startup.

#### **Ultraworking**

Web Dev Contractor 2018-2019

Coordinated remotely to prototype proof-of-concept features for a javascript-mithril web app.
Experimented with creative ways to produce dynamic content with no backend.

#### **CMU Academic Development**

Computer Systems Tutor 2018-2019 Theoretical Comp Sci Tutor 2019

# **Projects**

#### **Energy Tracker App**

Alarm prompts you hourly to report how much energy you have. Exports all data to csv for use with quantified self style research. Written in Java. Google Play Store

#### **Youtube Utility**

Desktop electron app to streamline getting music from youtube. Allows bulk downloads from playlists, and bulk editing of metadata.

jecneps/youtube-downloader

#### Tartan Hacks 2019 "Friz"

Partially implimented p2p messaging app that uses reverse-Tor packets to anonymize users and disconnect their IP address from their identity. Won "Most Ambitious Failure"

#### **ML Playground**

Interactive environment to play with the K-Nearest Neighbors algorithm. Lets you draw the digits to train and test on, allowing you to explore edge cases. Built in pygame. jecneps/ML-PlayGround

#### Alice in Canvas Land

Web based puzzle game that requires physically exploring CMU campus to crack the code. Levels designed in Google Sheets and animated with HTML Canvas. jecneps/alice-puzzle

### Misc

Eagle Scout 200-hour registered Yoga Teacher Professional Close-up Magician

## **Technical Proficiencies**













Python

C

Kotlin Mithril

Git

**Javascript**