# **Kevin Chen**

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# **EDUCATION**

## Massachusetts Institute of Technology

## B.S. IN ELECTRICAL ENGINEERING & COMPUTER SCIENCE (COURSE 6-2), GPA: 4.8

• Selected Coursework: Design & Analysis of Algorithms, Computer Systems Engineering, Software Construction, Computation Structures, Introduction to Machine Learning, Introduction to Algorithms, Interconnected Embedded Systems, Mathematics for Computer Science

# WORK EXPERIENCE

## Amazon Digital Goods, Commerce Setup Team

SOFTWARE DEVELOPMENT ENGINEER INTERN // SEATTLE, WA

 Using Java, designed and implemented the Attribute Modification (Atmo) Tool, a service enabling partial publishes (i.e. attribute-level publishes) of digital goods information to the Amazon Retail Catalog, integrated with existing ADGPublishing systems

## **Cambridge Electronics, Inc.**

SOFTWARE DEVELOPMENT & DEVICE MODELING INTERN // REMOTE

- Created a software tool for semiconductor device design using Python, Tkinter, and Gdspy, compatible with industry-standard GDSII format for integrated circuit layouts, significantly speeding up layout design and modification process; has since been adopted into company's long-term workflow
- MIT Lincoln Laboratory, Advanced Lasercom Systems & Operations Group Jan 2020 RESEARCH INTERN, UNDERGRADUATE TECHNICAL ASSISTANT // LEXINGTON, MA
  - With Autodesk EAGLE, designed driver circuit for optical switches in multi-aperture lasercom terminal; prototyped circuit with dual-inline-package integrated circuits and tested in laboratory setting
  - Using scripts, ran circuit accuracy simulation and generated mock input waveforms for lab testing

# LEADERSHIP EXPERIENCE

## **MIT Fall Career Fair Committee**

**DIRECTOR OF DAY-OF LOGISTICS** 

- Organized the first-ever physical-to-virtual transition of MIT's largest recruiting event
- Managed virtual fair platform and related logistics to optimize employer-student interaction

## **PROJECTS**

# musicards! -- 3rd Place, MIT Web.lab Competition

### **TEAM LEAD & MAIN DEVELOPER**

- For the MIT Web.lab competition, designed/built musicards! (https://musicards-mit.herokuapp.com), a website for sharing music with others through a public feed-based, trading card game-style system
- Built frontend in React.js and designed with CSS; used Express.js backend and MongoDB database
- Won 3rd place out of 90+ teams (judged by industry sponsors), as well as the Most Unique Concept prize and the Appian Special Category sponsor award

## IoT-Enabled Music Kit: Metronome + Sampling Synth 6.08 FINAL PROJECT (GROUP)

- Used Arduino on ESP32 microcontroller, HTML/Python on Flask, various hardware components to build "music kit" with metronome/keyboard synth modes and server-side data storage capabilities
- Metronome: set tempo on-device with button/claps or from webpage, realtime on-beat checking
- Synthesizer: record audio samples with device microphone and save them to cloud, play/edit collection of saved samples from webpage, select/play pitch-modulated samples on device keyboard

## Summer 2021

## **Summer 2020**

## Feb 2020 - Oct 2020

January 2021

# Spring 2020

2019-2023