

Katherine Xiong

Plano, TX | kxiong22@mit.edu | 972.740.8433

Education

Massachusetts Institute of Technology

Class of 2022

B.S. in Computer Science, GPA: 4.9/5.0

Relevant Coursework: Software Construction, Design and Analysis of Algorithms, Introduction to Machine Learning, Computation Structures, Embedded Systems, Real Analysis, Probability and Random Variables

Experience

Amazon

Seattle, WA

Software Engineering Intern

June – August 2020

- Built an internal web tool with a machine learning backend to analyze and diagnose customer workflow failures related to SageMaker Studio, and guide customer service team members through workarounds
- Used React for the front end and Flask, Python, and DynamoDB for the backend

MIT Computer Graphics Lab

Cambridge, MA

Research Assistant

May 2020 – Present

- Leveraged deep image priors to design deep convolutional neural networks for 3D scene reconstruction and novel view synthesis while significantly reducing time and space complexity compared to state-of-the-art models

Bank of America Merrill Lynch

New York City, NY

Trading Winter Analyst

January 2020

- Sat on Portfolio Risk/Index Strategy and ETF Trading desks
- Implemented a program in Python using the Bloomberg API to extract insights from IPO data and develop a trading strategy around lock-up expiration dates

UNT Computational Epidemiology and Response Analysis Lab

Denton, TX

Research Assistant

October 2016 – April 2018

- Developed a dynamic model in Java to simulate the spread of viral, vector borne diseases using temperature and spatial constraints not considered in previous models
- Co-authored a journal article titled “Modeling the 2013 Zika Outbreak in French Polynesia: Intervention Strategies”

Projects

Music Sync Lights

February - May 2020

- Built an end-to-end LED light system that can automatically sync to music or be programmed on a user interface

EcoFridge

June 2020

- Built a website in React that finds healthy recipes using items in your refrigerator with the Spoonacular API

Leadership

MIT Global Teaching Lab

Sao Paulo, Brazil

Teacher

January 2019

- Implemented workshops involving laser cutting, 3-D printing, Arduino, and MIT App Inventor in a makerspace for 60 children
- Designed and taught a three-day Introduction to Python class to 15 students age 12-18

Awards

MIT EECS Research and Innovation Scholar

3x American Invitational Mathematics Exam Qualifier (Score: 9)

USA Computing Olympiad Gold Division

Siemens Competition Semifinalist

Girl Scout Gold Award

Skills & Interests

Software: Java, Python, C++, PyTorch, Tensorflow, HTML/CSS, JavaScript, React, Redux, Flask

Language: English – fluent, Chinese – fluent

Interests: Dance, crosswords, origami, playing Tractor