500 Memorial Dr Cambridge, MA 02139 Zhenbang Chen zhenbang@mit.edu zhenbangchen.com (252) 458-3935

55 Linden Park Dr Clifton Park, NY 12065

#### **EDUCATION**

## **Massachusetts Institute of Technology (MIT)**

Cambridge, MA

Candidate for a Bachelor of Science in Computer Science and Engineering (GPA: 4.9/5.0)

2017-2021

Relevant Coursework: Advances in Computer Vision, Machine Learning, Analysis of Algorithms, Systems Engineering

# **EXPERIENCE**

## **OpenEve Scientific Software**

Boston, MA

Software Engineering Intern

June 2019 – August 2019

- Designed and implemented networking modules to interface with existing APIs of cloud native platform
- Contributed to visualization toolkits and new backend services
- Prototyped mixed reality molecular structure viewer app with cloud-based spatial anchors for shared experiences

MIT Game Lab Cambridge, MA

Software Engineering Intern

*June* 2018 – *February* 2019

- Developed backend/shaders/models/UI for a planetarium-based real-time visual simulation of special relativity
- Improved runtime performance by over 500% while significantly refining graphics and model quality
- Coordinated with Boston Museum of Science staff to test planetarium dome projections

## LEADERSHIP AND SERVICE

Code for Good Newton, MA

Nonprofit Consultant

February 2018 – May 2018

- Constructed frontend of a web system to guide site visitors to appropriate help/donor resources for The Second Step, a domestic violence prevention nonprofit group
- Met frequently with non-profit to identify design needs and discuss product specifications

## North Carolina Virtual Public Schools - Peer Tutoring Center

Raleigh, NC

Senior CS/Math/French Tutor

*January 2015 – August 2018* 

- Guided students in Computer Science, Math, Chemistry, and French courses in over 70 online tutoring sessions
- Engaged in recruitment of new tutors and in raising program profile
- Helped oversee transition to new tutoring interface through Upswing.io

#### **Engineers without Borders**

Cambridge, MA

Team Member

*October 2017 – May 2018* 

- Researched methods for constructing an irrigation system for the village of Mkutani, Tanzania
- Collaborated with the professional Boston Engineers without Borders chapter to plan an assessment trip to identify potential engineering challenges

# **SKILLS AND INTERESTS**

**Programming**Python, C#, JavaScript, Java, HTML, CSS, C++
Web Development
Node.is, React, Express, Firebase, Diango

**Game Development** *Unity, Blender* 

Languages English, Mandarin, French

Interests Running, Badminton, Digital Art, 3D Modeling, Chess, Historical Fiction

#### **PROJECTS**

**Einstein's Playground** – Planetarium-based real-time simulation for visualizing special relativity in everyday settings **Catan Generator** – Generator for mathematically fair, randomized starting setups for the boardgame Settlers of Catan **Fractoid** – Top-down shooting game written in Unity

**Chat Analysis** – Suite of functions for analyzing GroupMe message data through sentiment analysis, alias fetching, etc. **March Madness** – Visualizations of NCAA basketball match progression with datamined minute-by-minute statistics