# **Joel Ye**

# **Education**

#### **Georgia Institute Of Technology**

Atlanta, GA

B.S. Computer Science | Minor in Mathematics | GPA: 4.0 / 4.0

May 2020

Coursework: Advanced Algorithms, Info Theory, Computer Vision, Machine Learning, Deep Learning
 Stuyvesant High School

Manhattan, NY

Advanced NYS Regents Diploma | GPA: 4.0 / 4.0

Jun 2017

## Experience \_\_\_\_\_

#### Ubiquity6

San Francisco, CA

Software Engineering Intern | React Native, Python, Bash

May - Aug 2019

- · Prototyped wayfinding experience for navigating AR scenes, using a custom navigation mesh
- · Wrote UI screens for collecting user feedback, improving components for draggable content
- · Wrote SfM post-processing to prototype feature extraction training pipeline
- · Analyzed ARKit (Obj-C) and ARCore (Java) anchor drift, assessing viability for better pose priors
- Fix and extend render engine testing suite through Puppeteer, wrapping Three.JS API

HackGT Atlanta, GA

Director of Technology

Dec 2018 - Nov 2019

- · Lead 10+ students to make hackathon tech. Work on executive board to plan HackGT's events
- Lead curriculum committee to collaborate with campus CS organizations on workshops

Microsoft Redmond, WA

Microsoft Teams - Explore Intern | Typescript, Angular

May - Aug 2018

- Extend services and data channel to notify screensharers who can see their screen
- · Wrote unit tests and feature performance telemetry, assessed architecture viabilities
- · Used Electron to update toolbar UI, wrote accessible UI code to match design specs

# Publications \_

**J. Ye**, D. Batra, E. Wijmans, and A. Das. Multiple Auxiliary Tasks for Learning PointGoal Navigation. In submission, 2020.

## Projects \_\_

**Automatically Defined Functions** | *Automated Algorithm Design* 

Aug - Dec 2019

Designed and built self-defining functions in EMADE evolutionary ML engine, using DEAP framework
 Buzzer | github.com/HackGT/buzzer | Typescript, Node, GraphQL
 HackGT Tech 2018

- · Created GraphQL server that accepts notification media plugins and designed schema interface
- · Developed Twitter plugin for broadcast and Twilio plugin for targetted text notifications

Photobooth | github.com/HackGT/photo-style | Flask, JQuery

HackGT Tech Fall 2018

- · Interfaced with style-transfer server to collect styled photos, built masking app with HTML canvas
- · Set up server polling endpoint to interface with DSLR camera trigger, provide fallback laptop camera

#### Technical Skills

Proficient Python Javascript (ES8, Typescript) Bash Java HTML/CSS

Capable C SQL & NoSQL NumPy, PyTorch LaTeX Unit Testing

Frameworks React/RN Node Flask GraphQL Bootstrap/Blueprint/SemanticUl Angular

Programs 3DSMax Illustrator After Effects GIMP