Joel Ye

Education

Georgia Institute Of Technology

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

May 2020

M.S. Computer Science | Machine Learning Specialization | GPA: 4.0 / 4.0

May 2021

· Coursework: Comp. Neuroscience, Network Science, Info Theory, Computer Vision, Deep Learning for Text

Stuyvesant High School

Advanced NYS Regents Diploma | GPA: 4.0 / 4.0

Jun 2017

Publications and Presentations

J. Ye, D. Batra, E. Wijmans, and A. Das. Auxiliary Tasks Speed Up Learning PointGoal Navigation. In *Conference on Robot Learning (CoRL)*, 2020.

J. Ye, C. Pandarinath. Representation learning for neural population activity with Neural Data Transformers. Poster presentation at Neuromatch 3.0, 2020.

Experience_

Microsoft, Visual Document Intelligence, Software Engineering Intern - Remote

Summer 2020

- · Prototyped empty region annotation and data augmentation for document recognition frontend
- Integrated, benchmarked and analyzed data augmentation performance in C# backend

Ubiquity6, Software Engineering Intern - San Francisco, CA

Summer 2019

- Prototyped wayfinding experience for navigating AR scenes, using a custom navigation mesh
- · Wrote React Native UI 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
- Extended render engine testing suite through Puppeteer, wrapping Three.JS API

HackGT, Director of Technology - Atlanta, GA

2019

- · Led 10+ students to make hackathon tech. Worked on executive board to plan hackathon events
- Led curriculum committee to collaborate with campus CS organizations on workshops

Microsoft, Microsoft Teams, Explore Intern - Redmond, WA

Summer 2018

- Extend services and data channel to notify screensharers who can see their screen
- Update toolbar with accessible UI and add feature telemetry

Projects_

Automatically Defined Functions

Fall 2019

- Designed and built system to detect and extract useful functions in evolved computation trees
 Photobooth | github.com/HackGT/photo-style

 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 **Buzzer** | github.com/HackGT/buzzer 2018
 - Created GraphQL server that accepts notification media plugins and designed schema interface
 - Developed Twitter plugin for broadcast and Twilio plugin for targeted text notifications

Technical Skills _

Languages Frameworks Programs Python Javascript/Typescript Bash Java HTML/CSS C C# Pytorch/TF React/RN GraphQL Node LaTeX Unit Testing 3DSMax Illustrator After Effects GIMP