Joel Ye

Education

Georgia Institute Of Technology

Atlanta, GA

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

May 2020

M.S. Computer Science | Machine Learning Specialization

est. May 2021

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

Stuyvesant High School

Manhattan, NY

Advanced NYS Regents Diploma | GPA: 4.0 / 4.0

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Experience _

Microsoft Remote

Visual Document Intelligence - Software Engineering Intern | C#, Python, Typescript

May - Aug 2020

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

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

Publications and Presentations

J. Ye, D. Batra, E. Wijmans, and A. Das. Auxiliary Tasks Speed Up Learning PointGoal Navigation. In submission, 2020.

J. Ye, C. Pandarinath. Representation learning for neural population activity with Neural Data Transformers. Poster presentation at Neuromatch 3.0, 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 (Node, Typescript) Bash Java HTML/CSS

Capable C# C SQL & NoSQL LaTeX Unit Testing

Frameworks Pytorch React/RN Flask GraphQL Bootstrap/Blueprint/SemanticUI Angular

Programs | 3DSMax Illustrator After Effects GIMP