Joel Ye

joelye9@gmail.com ✉
joel99.github.io ➤

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

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

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