

Angela Dai

617-888-3408 || adai24@gatech.edu || [angles-d.github.io/website](https://github.com/angles-d) || <https://www.linkedin.com/in/adai24/>

Education

Georgia Institute of Technology, Atlanta, GA

Sept 2022–Expected May 2024

Master of Science in Computer Science

- Concentration in Computer Graphics

Bachelor of Science in Computer Science, 3.96 GPA

Aug 2020–Expected May 2023

- Concentration in Media and Artificial Intelligence

Relevant Course Work: Machine Learning, Computer Graphics, Computer Vision, Data Visualization, Video Game Design, UX Design, Linear Algebra, Data Structures and Algorithms, Object Oriented Programming, Discrete Math

Experience

AGCO Corporation

Feb 2023–Present

Augmented Reality Developer Intern

- Implemented AR training tutorials and equipment guides with **Vuforia Studio** and **JavaScript**
- Built a mobile AR app to aid farmers with equipment maintenance using **Vuforia**, **Unity**, and **C#**
- Overlaid digital CAD models over physical equipment with model targeting to guide the user through maintenance tasks

Georgia Tech: Digital Integrative Liberal Arts Center

Oct 2021–Present

Augmented Reality Developer, Project Manager

- Led a 3-person development team in building a location-based AR installation that recreates the Atlanta Pickrick protests that occurred on Georgia Tech's campus using **Unity**, **Blender**, and **C#**
- Created an AR timeline to add historical context and anchor the experience in the physical world using image recognition and **ARFoundation**
- Developed an AR hotspot system that utilizes spatial anchors and collisions to allow user interaction at predefined locations within the environment

Viasat Inc.

May 2022–Aug 2022

Software Engineering Intern

- Developed a StackStorm data visualization tool to monitor the event automation's trigger and action metrics for outage detection and server optimization on the team's EC2 servers using **Python** and **AWS Cloudwatch**
- Created and updated unit tests to ensure automated test coverage for newly migrated features using **Python** and **Jenkins CI/CD** pipeline

Georgia Tech: Augmented Environments Lab

Sep 2020–May 2021

Research Assistant

- Collaborated with a 3-person team to develop an interactive VR environment representing McCloud's "Big Triangle" using **JavaScript**, Mozilla Hubs, and **Three.js**
- Implemented real-time model transformations based on the user's position in the room using morph targets and shape-keys with **Three.js** and **Blender**

Projects

AR Pathfinding Game | Individual

Dec 2022–Present

- Created an AR game where the player must manipulate their real-world surroundings to get an AI character to its destination using **Unity**, **C#**, and Niantic's **ARDK** package
- Implemented real-time environment scanning and tracking using **ARMeshes**, waypoints, and raycasts

LetsBuild! | Hackathon

Oct 2022

- Developed a collaborative AR block building game to encourage more productive screentime for children using **Unity** and **C#** during HackGT
- Utilized AR and physics raycasting to enable player interaction with both real-world and AR objects

Publications

- Zhao, Yuchen, Brandy J. Pettijohn, Amanda Y. Wang, Daniel P. Keehn, Angela Dai, Joy Dang, Janet H. Murray (2022). "Exploring Location-based AR Narrative Design for Historic Site," *PRESENCE: Virtual and Augmented Reality* 2022 [Under Review]

Skills

Programming:

Python, C#, Java, JavaScript, HTML, CSS, C++, Swift, GLSL

Frameworks & Libraries:

ARFoundation, Numpy, PyTorch, Scikit, Tensorflow, Three.js, D3.js, A-Frame, Agile

Tools:

Unity, Vuforia, Blender, Creo, Git, AWS, Docker, Adobe Suite, Visual Studio