

Angela Dai

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Education

Georgia Institute of Technology, Atlanta, GA

Aug 2020–Expected May 2024

Bachelor of Science in Computer Science, 3.95 GPA

- Concentration in Media and Artificial Intelligence

Relevant Course Work: Computer Graphics, Computer Vision, Intro to AI, Video Game Design, Linear Algebra, Data Structures and Algorithms, Design and Analysis of Algorithms, Object Oriented Programming/Design, Discrete Math

Experience

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**
- Migrated a server API from an internal library to an inner source solution for increased maintainability and consistency through the platform using **Python**
- Created and updated unit tests to ensure test coverage for newly migrated features using **Python** and **Jenkins** CI/CD pipeline

Georgia Tech: Digital Integrative Liberal Arts Center

Oct 2021–Present

Software Developer, Project Manager

- Led a 3-person development team in building a location-based AR installation that recreates the 1965 Atlanta Pickrick protests that occurred on Georgia Tech's current day 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

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 to emphasize the association between the three main concepts using morph targets and shape-keys with **Three.js** and **Blender**

Projects

LetsBuild! | Hackathon

Oct 2022

- Developed a collaborative AR block building game to encourage more productive screentime for children using **Unity** and **C#** during HackGT
- Implemented AR multiplayer using Apple's Multipeer Connectivity framework to encourage real-world communication between players
- Utilized AR and physics raycasting to allow the player to interact with both real-world and AR objects

Ray Tracer | Individual

Sep 2022

- Built a ray tracer from scratch to render a 3D scene using a path tracing algorithm with **C++**

Computer Vision Projects | Class

Fall 2022

- Created an image feature matching algorithm based on the SIFT pipeline using **Python**, **Pytorch**, and **Numpy**
- Used RANSAC to solve for the camera movement between images using the fundamental matrix with **Python**

Leadership

College of Computing Peer Mentoring

Aug 2022–Present

Peer Mentor

- Mentored a cohort of 24 computer science freshman, providing academic, social, and professional advice
- Organized monthly meetings to foster team bonding and networking amongst mentees

Skills

Programming:

Python, Java, C, C#, C++, JavaScript, HTML, CSS, Swift, HLSL, Assembly

Frameworks & Libraries:

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

Tools:

Git, AWS, Docker, Unity, Blender, Adobe Suite, Figma, Xcode, Visual Studio, Linux