

Yangyang He

✉ yangyang.he@columbia.edu | 🏠 hyy369.com | 📧 hyy369 | 🌐 hyy369

Education

Columbia University

New York, NY

M.S. CANDIDATE IN COMPUTER SCIENCE

Expected Dec. 2019

- Vision and Graphics track; Coursework touches various aspects of computer graphics and human-computer interaction, including: Augmented Reality, User Interface Design, Physics-based Computer Animation, Artificial Intelligence.

College of William & Mary

Williamsburg, VA

B.S. IN COMPUTER SCIENCE AND FILM AND MEDIA STUDIES

May. 2018

- Magna Cum Laude Honors Degree, Honors in Computer Science, tribeHacks II NLP Challenge Winner, tribeHacks III top 5.
- Senior coursework: Computer Graphics, Computer Animations, Game Design and Development, Database Systems.
- Leaderships: ACM chapter PR chair, web-master, Photo Club President, CSSA Media Chair.
- Volunteers: MH370 Investigation Report translator and peer-reviewer, Google Translate Community member, Peer Academic Advisor.

Technical Skills

Languages Python, Java, HTML/CSS, C++, PHP, PostgreSQL, LaTeX, JavaScript, C#, Swift

Environments Linux, macOS, Git, Maya, Unity, SFML, Bootstrap, jQuery

Experience

Columbia Computer Graphics and User Interface Lab

New York, NY

RESEARCH ASSISTANT

Sep. 2018 - Present

- Develop a cloud-based software for directors to collaborate and create interactive non-linear stories.
- Design a platform to enhance user interaction using digital footprints and facial & speech recognition (MS Azure and IBM Watson PI).
- Develop an iOS AR application to play interactive stories with 3D animated avatars using Unity.

DreamWorks

Shanghai, CN

SOFTWARE ENGINEER INTERN AT DIGITAL OPERATIONS TEAM

May. 2016 - Jul. 2016

- Updated Calendar API of internal portal using Java and Play Framework.
- Designed and implemented an online gallery with upload via email functionality using HTML, CSS, JavaScript, and Python.
- Forecast rendering time of Kung Fu Panda Dubai Ride production using Python.

Abbott

Shanghai, CN

DATA ANALYST INTERN AT SALES FORCE EFFECTIVENESS TEAM

Jun. 2015 - Aug. 2015

- Used Baidu Map API to supply geographic information for 30,000+ hospitals in the database and removed duplicate entries.
- Processed reports from 120+ sales representatives nationwide in CRM system.
- Generated QlikView documents using reports in sales database.

Publications & Projects

Procedural Generation and Rendering of Ink Bamboo Paintings [W&M Publish] [Submitted to SIGGRAPH Asia 2018]

YANGYANG HE, ADVISOR: PROF. TIMOTHY A. DAVIS

- Designed an algorithm that procedurally generates and renders various ink bamboo paintings and implemented in Python.

Serene Space Adventure Game [GitHub]

TAO ZHANG, YANGYANG HE, ERIK STEVENSON, CULLEN ROMBACH

- Collaborated with a team of 4 over 3 months to design and develop a physics based space adventure game, which received compliments from industry professionals for its good gameplay, creative design, and polished artwork.

3D Recursive Ray Tracing [Web]

YANGYANG HE, INSTRUCTOR: PROF. PIETER PEERS

- Implemented a recursive ray tracer in C++ as a course project that renders XML format scenes and produce PPM/PFM images.

Classroom Booking Service [GitHub]

YANGYANG HE, NICHOLAS WHAY, SHENNIE YAO

- Collaborated with a team of 3 over 3 months to create a database and a web app that can book classrooms and schedule classes.