

# Yangyang He

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## Experience

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### Audible, an Amazon company

SOFTWARE DEV ENGINEER

Newark, NJ

Feb. 2019 - present

- Builds Audible experiences on amazon.com, Alexa, Kindle, and Fire devices.

SOFTWARE DEV ENGINEER INTERN

Jun. 2019 - Aug. 2019

- Designed a membership onboarding page that increases the number of subscribers to premium and annual plans.

### Columbia Graphics and UI Lab

RESEARCH ASSISTANT

New York, NY

Sep. 2018 - Mar. 2019

- Lead the controller team in Unity development and cooperate with other team leads in the lab.
- Develop an interactive AR storytelling platform using Unity, Vuforia, ARKit, C#, and Swift.

### DreamWorks

DIGITAL OPERATIONS INTERN

Shanghai, CN

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.

## Education

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### Columbia University

M.S. IN COMPUTER SCIENCE

New York, NY

Dec. 2019

- Coursework includes Agile Project Management, Computer Networks, UI Design, 3D UI and AR, Visual Databases, A.I.

### College of William & Mary

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

Williamsburg, VA

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 and web-master, Photo Club President.
- Volunteers: MH370 Investigation Report translator and peer-reviewer, Google Translate Community member, Peer Academic Advisor.

## Technical Skills

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

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

## Research & Projects

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### Interactive Augmented Reality Storytelling

YANGYANG HE WITH RESEARCH GROUP OF PROF. AMIR BARADARAN

- Work with the team to create a software that allows writers to produce non-linear stories that interact with viewers according to their digital footprints and real time reactions as well as the client application that allows viewers to enjoy such experience on iOS devices.

### 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 in C++, 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.