Yangyang He

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Education

Columbia University *New York, NY*

M.S. CANDIDATE IN COMPUTER SCIENCE *Expected Dec. 2019*

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

Technical Skills

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

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

Experience

Columbia Computer Graphics and User Interface Lab *New York, NY*

RESEARCH ASSISTANT *Sep. 2018 - Present*

- Work with the research group on augmented reality projects using Unity, Vuforia, ARKit, C#, and Swift.

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.
- Generated QlikView documents using reports from 120+ sales representatives nationwide in CRM database.

Researches & Projects

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.

Classroom Booking Service [GitHub]

NICHOLAS WHAY, YANGYANG HE, SHENNIE YAO

- Collaborated with a team of 3 over 3 months to create a database and a web application that collects reservation requests and produce optimal classroom schedules using PHP, Python, and PostgreSQL.