

RESEARCH OBJECTIVE

My research interests lie at the intersection of computer graphics and human computer interaction (HCI). My work focuses on creating new tools, workflows, and algorithms that make it easier for people to edit and consume video. The broader goal of my research is to democratize video as a means of storytelling.

EDUCATION

- 9/2018-
Present **Stanford University** · PhD student in Computer Science
Advised by Maneesh Agrawala
- 2015 **Stanford University** · Master of Science in Computer Science
Mobile and Internet Computing Focus
- 2014 **Stanford University** · Bachelor of Science in Computer Science
Human Computer Interaction Focus

PUBLICATIONS

- 2021 **Automatic Generation of Two-Level Hierarchical Tutorials from Instructional Makeup Videos**
Anh Truong, Peggy Chi, David Salesin, Irfan Essa & Maneesh Agrawala. *CHI*
- 2019 **Video Event Specification using Programmatic Composition**
Daniel Y. Fu, Will Crichton, James Hong, Xinwei Yao, Haotian Zhang, Anh Truong, Avanika Narayan, Maneesh Agrawala, Christopher Ré & Kayvon Fatahalian. *AI Systems @ SOSP 2019*
- 2019 A Tool for Navigating and Editing 360 Video of Social Conversations into Shareable Highlights
Anh Truong & Maneesh Agrawala. *Graphics Interface*
- 2019 **How to Design Voice Based Navigation for How-To Videos**
Minsuk Chang, Anh Truong, Oliver Wang, & Juho Kim. *CHI*
- 2018 Extracting Regular FOV Shots from 360 Event Footage
Anh Truong, Sara Chen, Ersin Yumer, David Salesin & Wilmot Li. *CHI*
- 2017 **Submodular Trajectory Optimization for Aerial 3D Scanning**
Mike Roberts, Debadeepta Dey, Anh Truong, Sudipta Sinha, Shital Shah, Ashish Kapoor, Pat Hanrahan & Neel Joshi. *ICCV*
- 2017 **Computational Video Editing for Dialogue-Driven Scenes**
Mackenzie Leake, Abe Davis, Anh Truong & Maneesh Agrawala. *SIGGRAPH*
- 2016 **QuickCut: An Interactive Tool for Editing Narrated Video**
Anh Truong, Floraine Berthouzoz, Wilmot Li & Maneesh Agrawala. *UIST*

2015 **An Interactive Tool for Designing Quadrotor Camera Shots**
Niels Joubert*, Mike Roberts*, Anh Truong, Floraine Berthouzoz, Pat Hanrahan. *SIGGRAPH Asia*. Featured in the *SIGGRAPH Asia 2015 Technical Papers Trailer*

WORK EXPERIENCE

- 6/2019-present **Google** · Student Researcher, Machine Perception
- Leading research projects in video consumption and synthesis.
 - Contributed to engineering on a new product initiative.
- 3/2016-9/2018 **Adobe Systems** · Research Apprentice, Creative Intelligence Lab
- Led and contributed to various research projects for publication at top tier conferences.
 - Contributed to lab initiatives such as women's lunches, retreats, scholarship programs, etc.
 - Mentored research interns.
- 9/2014-1/2016 **Stanford Computer Graphics Laboratory** · Research Assistant
- Front end design and implementation for the quadrotor shot planning tool (Joubert 2015).
 - Led QuickCut (Truong 2016) project on editing narrated video using time aligned transcripts.
- Summer 2015 **Splunk Inc.** · Frontend Engineering Intern
- Built and shipped multiple interfaces and features for the Distributed Management Console used monitor distributed, multi-instance deployments of Splunk.
 - Initiated and led a persistent code base refactor.
- 2/2015-6/2015 **Adobe Systems** · Creative Technology Lab Intern
- Extended the drone shot preplanning tool (Joubert 2015) to enable users to dynamically modify preplanned flight paths in real time as the drone is in the air.
- 2/2014-9/2014 **WhosHere Inc.** · Software Engineering Intern
- Contributed features for a chat application on both iOS and Android using Xamarin.
 - Refactored client code base for testability and built client-side unit and integration test suite.
 - Discovered and debugged major application web socket connectivity issues.
- Summer 2013 **Stanford University** · CURIS Intern
- Built an app for creating interactive narratives that leverages location and temporal data.
 - Designed and implemented an interactive math whiteboard widget for a digital textbook platform based on principles in education research.
- 3/2013-8/2013 **Stanford MobiSocial Labs** · Research Assistant
- Organized the Imagine Mobile Video Competition to encourage interest in computer science amongst middle and high school students.
- Summer 2012 **Appirits Inc.** · Software Engineering Intern
- Implemented a chat server for a multiplayer online role-playing game

AWARDS

- 2020 **Brown Institute for Media Innovation: Magic Grant**
- 2019 **Brown Institute for Media Innovation: Magic Grant**
- 2014 **Class of 2014 Stanford Award of Excellence** (*awarded to 10% of graduating class*)
- 2013 **Stanford Residential Education: Riddell Fund Grant**

TEACHING AND MENTORSHIP

- 2019-
Present **Stanford Asian American Activities Center** · Graduate Student in Residence
- Hosting workshops, participating in panels and having office hours to guide undergraduate students from underserved backgrounds on how to get involved with campus research.
 - Scoping projects, reading applications, conducting mock interviews & drafting emails for students applying to research positions, fellowships & grants.
 - 10+ mentees successfully received competitive fellowships and research positions.
 - Leading workshops & participating in panels on graduate life and resources at Stanford for incoming graduate students.
- 2019 **CS448M: Making Making Machines for Makers** · Teaching Assistant
- CS448M was a project based course that walked students through systems and processes for making things using computer-aided design and manufacturing, and provided an introduction to machines and machine tools.
 - Responsibilities included: contributing to course design, leading a lecture, coordinating guest speakers, reviewing applications, preparing and managing assignments, managing course logistics, holding office hours and mentoring students, laser cutting machine parts.
- 2017,
2018 **Adobe Research Summer Internship** · Mentor
- Worked closely with students to develop and scope research projects.
 - Assisted in algorithmic and user study implementation.
 - Served as primary mentor to two students and secondary mentor to two others.
 - Both primary mentorships resulted in successful research publications to CHI.

CONTRIBUTIONS TO DIVERSITY

- 2016-
2020 **Berthouzoz Women in Research Lunch at SIGGRAPH** · Co-leader
- Grew the event from an informal networking gathering for women in computer graphics research to a formally sponsored lunch attended by over 100 people and growing each year.
 - Coordinated speakers, and handled logistics, fundraising efforts & event program.
- 2019 **Grace Hopper Conference Career Fair** · Student Volunteer at Stanford CS Booth
- Answered questions and gave advice about CS graduate programs and the application process in hopes of encouraging women to apply.
- 2016 **Girls Who Code**, Mentor
- 2016 **Stanford d.school Novice Hackathon**, Technical Mentor
- 2015 **Castilleja School Girls Hackathon**, Design & Technical Mentor

REVIEWING EXPERIENCE

- 2020 **ACM Conference on Computer-Supported Cooperative Work and Social Computing** · Papers
- 2016-2020 **ACM User Interface Software and Technology Symposium (UIST)** · Papers
- 2018-2020 **ACM Conference on Human Factors in Computing Systems (CHI)** · Papers
- 2019 **ACM Creativity and Cognition** · Posters
- 2018 **ACM Transactions on Multimedia Computing, Communications, and Applications** · Papers

SERVICE AND LEADERSHIP

- 2019-present **Stanford HCI + Graphics Community Retreat** · Co-organizer
- Organizing a lab wide retreat and social events for over 50 students and professors.
 - Managing budgets, coordinating transportation, housing and other logistics & planning programming for a multi-day retreat.
- 2016 **Adobe + Stanford Futures Retreat**, Adobe Organizer
- Coordinated speakers and scheduling for a multi-day retreat with researchers from both Adobe Research and Stanford University.
- 2011-2014 **Stanford Listen to the Silence, Asian American Issues Conference**
Co-chair (2014); Workshops Co-chair (2011-2013)
- As co-chair, led a team of 40 students in organizing a large-scale, \$20,000 conference for community education on Asian American issues with over 600 attendees from all over.
 - Outreached to dozens of non-profits organizations and student groups to solicit workshop applications. Read applications & coordinated scheduling and other logistics for workshops.
- 2010-2013 **Stanford Vietnamese Student Association, NorCal United Vietnamese Student Association**
Intercollegiate Council Representative (2012, 2013); Freshman Intern (2010)
- 2010-2013 **Stanford Asian American Activism Committee**
Webmaster (2011-2013); General Core (2010-2013)

PRESS COVERAGE

- 2017 Adobe and Stanford just taught AI to edit videos – with impressive results, *Digital Trends*
AI film editor can cut scenes in seconds to suit your style, *Engadget*
Tedious Film Editing Could Soon Become a Thing of the Past, *TrendinTech*
Editing time slashed with the help of artificial intelligence, *The Video Mode*
- 2015 New App Lets Drone Pilots Customize Flight Path and Camera Movement Before Takeoff, *Digital Trends*
Interactive Drone App Lets You Capture Aerial Shots Like a Pro, *Engadget*
Researchers Create Software for Designing Pro Drone Shots in a Virtual World, *Petapixel*

SKILLS

Programming Languages

JavaScript, Python, HTML/CSS, · (Substantial use in the last 2 years)

C++, C, MATLAB, Java, PHP, R · (Moderate use in the last 2 years)

Frameworks & Databases NodeJS, Flask, MongoDB, MySQL

Tools Heroku, Amazon Mechanical Turk (Requester), Docker, Kubernetes

Foreign Language English (Native), Vietnamese (Conversational), Japanese (Basic)

Other Adobe Premiere Pro, Adobe Illustrator, Event Planning, Project Management