

RESEARCH INTERESTS

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

WORK EXPERIENCE

- 6/2019-
Present **Google**
Research Intern, Machine Perception
- Leading a research project on video understanding with the goal of submitting to SIGGRAPH.
 - Collaborators include: Peggy Chi, Irfan Essa, Maneesh Agrawala, David Salesin.
- 3/2016-
9/2018 **Adobe Systems**
Research Apprentice, Creative Intelligence Lab
- Led and contributed to various research projects for publication at top tier conferences such as SIGGRAPH, CHI, ICCV and UIST (see publications).
 - Contributed to lab initiatives such as women's lunches, retreats, scholarship programs, etc.
 - Mentored four research interns in summer 2017 & 2018.
- 9/2014-
1/2016 **Stanford Computer Graphics Laboratory**
Research Assistant
- Designed and built the front end for the quadrotor camera 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 to monitor distributed, multi-instance deployments of Splunk.
 - Contributed to 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.
 - Found and debugged major application web socket connectivity issues.
- Summer 2013 **Stanford University**
CURIS Intern
- Built an app for creating interactive narratives that leverage location and temporal data in addition to traditional photos and text content.
 - 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.
- Summer 2012 **Appirits Inc.**
Software Engineering Intern
- Implemented a guild chat server for a multiplayer online role-playing game.

AWARDS

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

PUBLICATIONS

- 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
- 2019 **How to Design Voice Based Navigation for How-To Videos**
Minsuk Chang, Anh Truong, Oliver Wang, Juho Kim
ACM Conference on Human Factors in Computing Systems (CHI)
- 2018 **Extracting Regular FOV Shots from 360 Event Footage**
Anh Truong, Sara Chen, Ersin Yumer, David Salesin, Wilmot Li
ACM Conference on Human Factors in Computing Systems (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
International Conference on Computer Vision (ICCV)
- 2017 Computational Video Editing for Dialogue-Driven Scenes
Mackenzie Leake, Abe Davis, Anh Truong, Maneesh Agrawala
ACM Transactions on Graphics 36 (SIGGRAPH 2017)
- 2016 QuickCut: An Interactive Tool for Editing Narrated Video
Anh Truong, Floraine Berthouzoz, Wilmot Li, Maneesh Agrawala
29th ACM User Interface Software and Technology Symposium (UIST)
- 2015 An Interactive Tool for Designing Quadrotor Camera Shots
Niels Joubert*, Mike Roberts*, Anh Truong, Floraine Berthouzoz, Pat Hanrahan
ACM Transactions on Graphics 24 (SIGGRAPH Asia 2015)
Featured in the SIGGRAPH Asia 2015 Technical Papers Trailer

TEACHING AND MENTORSHIP

- 2019-2020 Stanford Asian American Activities Center
Graduate Student in Residence
- Mentoring undergraduate students from underserved backgrounds on research involvement.
- 2019 CS448M: Making Making Machines for Makers
Course Assistant
- 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.

REVIEWING EXPERIENCE

ACM User Interface Software and Technology Symposium (UIST)
Technical Papers: 2019, 2018, 2016

ACM Conference on Human Factors in Computing Systems (CHI)
Technical Papers: 2020, 2019, 2018

ACM Creativity and Cognition
Posters: 2019

ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM)
Technical Papers: 2018

SERVICE AND LEADERSHIP

- 2016-present Berthouzoz Women in Research Lunch at SIGGRAPH
Co-leader
- Handling logistics, fundraising and outreach for a lunchtime speaker event attended by 100+ women in computer graphics research at SIGGRAPH.

- 2016 Adobe + Stanford Futures Retreat, Adobe Organizer
- 2016 Girls Who Code, Mentor
- 2016 Stanford d.school Novice Hackathon, Technical Mentor
- 2015 Castilleja School Girls Hackathon, Design & Technical Mentor
- 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 the USA.
- 2010-2013 Stanford Vietnamese Student Association, NorCal United Vietnamese Student Association
Intercollegiate Council Representative (2012, 2013); Freshman Intern (2010)
- 2010-2013 Stanford Asian American Activist Committee
Webmaster (2011-2013); General Core (2010-2013)

INVITED TALKS

- 2017 Computational Tools for Video Editing
TWIT.tv, Nov 2017
Unity SF, Sept 2017
- 2016 Stanford-Berkeley Women in CS/EE Research Meetup
Industry Panelist

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)*
Ruby · *(Beginner)*

Frameworks NodeJS, Flask, Rails

Databases MongoDB, MySQL

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

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

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