Jasmine Y. Shih

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EDUCATION

Master of Science, Computer Science

Stanford University

- Specialization in HCI
- GPA: 3.90

Bachelor of Science, Computer Science

University of Illinois at Urbana-Champaign

- Graduated with Highest Honors
- GPA: 3.90

RESEARCH EXPERIENCE

Independent Study

Department of Computer Science, Stanford University

- Work 10 hours a week for 4 course units with professor Hari Subramonyam.
- Develop Data Dialog, a visualization dashboard that displays data documentation and supports communication between data scientists and domain experts in data-centric machine learning workflows.

Class Project for CS347: HCI Research

Department of Computer Science, Stanford University

- Contributed equally with 3 other graduate students to class final project.
- Co-designed visualization features for social annotation to address issues with using social annotation tools for research paper discussion revealed by prior research.
- Developed interactive visualizations of social annotation data and integrated the features into a prototype social annotation tool using React and D3.js.
- Co-designed and co-conducted user study with 8 participants to evaluate the effects of the visualization features.
- Spearheaded poster submission of research results to IEEE VIS 2022 (accepted).

SPIN Internship

Advanced Visualization Lab, National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign

• Worked 10 hours a week as an intern in the Student Pushing Innovation (SPIN) program under guidance of mentors Kalina Borkiewicz and AJ Christensen.

August 2015 – May 2019

September 2022 – Present

Spring 2022

September 2021 – Present

August 2018 – May 2019

- Wrote scripts in Python and C# to experiment with and benchmark the graphics rendering capabilities of the Unity game engine using scientific data of up to 1 million particles.
- Developed a desktop application of an interactive cinematic visualization of the moon formation using Unity.
- Conducted between-subjects user study with over 70 school-age participants to examine the effects of the interactive visualization compared to a non-interactive version.
- Presented research results in poster sessions and Student Research Competition (won first place award in undergraduate category) at ACM SIGGRAPH 2019.

Independent Study

January 2019 – May 2019

Department of Computer Science, University of Illinois at Urbana-Champaign

- Worked with professors Eric Shaffer and Ranjitha Kumar for independent study credit.
- Wrote Python scripts to perform data cleaning on over 5,000 entries of emoji data obtained from Opico, a mobile social platform for emoji-first and location-centric communication.
- Developed 3 interactive web visualizations using the D3 JavaScript library to assist with pattern discovery in emoji expressions and emoji usage analysis.
- Presented project results in poster session at IEEE VIS 2019.

POSTER PRESENTATION & PUBLICATION

Jasmine Shih, Nick Feffer, Miroslav Suzara, and Kevin Wang. 2022. AnnoDiver: applying visual analytics on social annotations to facilitate balanced research paper discourse [Poster session]. In *IEEE VIS 2022*.

Jasmine Shih, Eric Shaffer, Ranjitha Kumar, and Sujay Khandekar. 2019. Using visual analytics to understand emoji-first communication [Poster session]. In *IEEE VIS 2019*. (Poster preview video: https://vimeo.com/361162822)

Jasmine Y. Shih, Kalina Borkiewicz, AJ Christensen, and Donna Cox. 2019. Interactive cinematic scientific visualization in unity. In *ACM SIGGRAPH 2019 Posters (SIGGRAPH '19)*. Association for Computing Machinery, New York, NY, USA, Article 69, 1–2. https://doi.org/10.1145/3306214.3338588

CONFERENCE ATTENDANCE

 EEE VIS 2022 (Oklahoma City, Oklahoma) Attended full conference virtually as poster author 	October 16-21, 2022
IEEE VIS 2019 (Vancouver, Canada)	October 20-25, 2019
ACM SIGGRAPH 2019 (Los Angeles, California)	July 28-August 1, 2019
 Attended full conference in-person as poster author Contributed 25 hours of service at the conference as student 	volunteer

TEACHING EXPERIENCE

Course Assistant for CS107: Computer Org & Systems

Department of Computer Science, Stanford University

- Lead 1.5-hour lab section of around 20 students weekly.
- Hold a total of 4 office hours weekly to assist students with assignments.
- Grade assignments, midterm exams, and final exams.
- Answer student questions on online forum.

Course Assistant for CS498: Virtual Reality

Department of Computer Science, University of Illinois at Urbana-Champaign

- Supervised two groups of students in completing final project each semester.
- Held 2 office hours in the VR lab weekly to assist students with lab assignments.
- Released and graded machine lab assignments.
- Developed class project gallery page and maintained collection of past student projects.
- Scheduled, organized, and graded final project presentations.

Course Assistant for CS233: Computer Architecture

Department of Computer Science, University of Illinois at Urbana-Champaign

- Held 2 office hours and assisted TA with 2 discussion sections weekly.
- Co-developed a 2D robot game program, using C and C++, for a class assignment where students wrote MIPS code to score against each other.

HONORS & AWARDS

Undergraduate Winner, ACM SIGGRAPH Student Research Competition July 2019

• Selected first-place for research on building interactive cinematic scientific visualizations in the Unity game engine.

Dean's List, UIUC College of Engineering

• Honored for earning a grade-point average in the top 20% of the college of engineering in all undergraduate semesters

Fiddler Innovation Award, Fiddler Innovation Fellowship

• Awarded \$1,000 for web development work done for the Advanced Visualization Lab as part of the SPIN program

Engineering Freshman Scholarship, Ford Foundation Fall 2015 - Spring 2016

• Awarded \$5,000 towards first-year tuition for academic achievements in high school

August 2016 – May 2018

September 2021 – Present

August 2018 – May 2019

Fall 2015 - Spring 2019

October 2018

PROFESSIONAL HISTORY

Software Development Engineer

Verizon Media (Yahoo!), Champaign, Illinois

- Develop new features for an internal web app for cloud project tracking and onboarding using Ember.js, Node.js, and MySQL queries.
- Maintain and write new scripts that are run daily to validate or move data.
- Build and maintain RESTful API endpoints.
- Fix usability bugs and attend to errors in cron jobs.
- Mentored two interns and a new hire in the summer of 2020.

Software Development Intern

Verizon Media (Yahoo!), Champaign, Illinois

- Built new features for an internal web app for cloud project tracking and onboarding using Ember.js, Node.js, and MySQL queries.
- Improved the usability of the web app and fixed UI defects.
- Built RESTful API endpoints to support new features.
- Performed unit testing using Mocha, Chai, and Sinon.

SPIN Intern

Advanced Visualization Lab, National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign

- Developed a new WordPress theme for the website of the Advanced Visualization Lab (<u>link</u>) using HTML, CSS, JavaScript, and PHP, in collaboration with a design intern.
- Remodeled two websites owned by the Advanced Visualization Lab to make them responsive, more user friendly, and easier to manage.

LEADERSHIP EXPERIENCE

Chair of SIGGRAPH, UIUC Chapter

- Led weekly meetings and organized social events.
- Supervised chapter's progress on group animation projects.
- Organized and hosted a booth to showcase club projects at Engineering Open House in March 2018.
- Held 3D modeling and animation tutorials in Blender.

PRESS

Scientific Visualization in Game Engines: Get to Know the 2019 Undergrad Student Research Winner, ACM SIGGRAPH Blog, 10/17/2019. NCSA Student Spotlight: Jasmine Shih, NCSA Press, 03/26/2019. 16 Students Receive NCSA's Fiddler Innovation Fellowships, NCSA Press, 10/29/2018.

August 2016 – May 2018

August 2017 – May 2018

Summer 2018

August 2019 – June 2021