

Jasmine Shih

1310 S. Race St., Urbana, IL 61801

(217) 718-4632

jasmineyshih@gmail.com

<https://jasmineyshih.github.io/>

EDUCATION

Bachelor of Science, Computer Science

May 2019

University of Illinois at Urbana-Champaign

- Highest Honors
- GPA: 3.90

RESEARCH EXPERIENCE

SPIN Internship

August 2018 – May 2019

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.
- 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 survey study with over 70 school-age subjects to examine the effects of the interactive visualization on young viewers 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

- Registered for a total of 3 credit hours of independent study with professors Eric Shaffer and Ranjitha Kumar for research.
- 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 three interactive web visualizations using the D3 JavaScript library to assist with pattern discovery in emoji expressions and emoji usage analysis.
- Presented study results in poster session at IEEE VIS 2019.

TEACHING EXPERIENCE

Course Assistant for CS498: Virtual Reality

August 2018 – May 2019

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

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

Course Assistant for CS233: Computer Architecture

August 2016 – May 2018

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

- Held two 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.

PROFESSIONAL HISTORY

Software Development Engineer

August 2019 – Present

Verizon Media (Yahoo!), Champaign, Illinois

- Develop new features for an internal web app for cloud project tracking and onboarding using Ember, Node, 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

Summer 2018

Verizon Media (Yahoo!), Champaign, Illinois

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

SPIN Intern

August 2016 – May 2018

*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 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.

POSTER PRESENTATION & PUBLICATION

Shih, J. Y., Shaffer, E., Kumar, R., & Khandekar, S. (2019, October). *Using visual analytics to understand emoji-first communication*. Poster presented at IEEE VIS 2019, Vancouver, Canada. (Poster preview video: <https://vimeo.com/361162822>)

Shih, J. Y., Borkiewicz, K., Christensen, A., & Cox, D. (2019, July). Interactive cinematic scientific visualization in unity. In *SIGGRAPH '19: ACM SIGGRAPH 2019 Posters*, Los Angeles, California. New York, NY: Association for Computing Machinery. Article 69, 1–2. doi: 10.1145/3306214.3338588

HONORS & AWARDS

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|---|--------------------------------|
| Undergraduate Winner, ACM SIGGRAPH Student Research Competition | July 2019 |
| <ul style="list-style-type: none">Selected first-place for research on building interactive cinematic scientific visualizations in the Unity game engine. | |
| Dean's List, UIUC College of Engineering | Fall 2015 - Spring 2019 |
| <ul style="list-style-type: none">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 | October 2018 |
| <ul style="list-style-type: none">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 |
| <ul style="list-style-type: none">Awarded \$5,000 towards first-year tuition for academic achievements in high school | |

LEADERSHIP EXPERIENCE

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| Chair of SIGGRAPH, UIUC Chapter | August 2017 – May 2018 |
| <ul style="list-style-type: none">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.