Jasmine Otto

Critical visualization researcher

Education

- 2018–2023 PhD, Computational Media, UC Santa Cruz "Software Instruments: Creativity Support Tools for Experts"
- 2015–2018 **MS, Applied Math**, University of Illinois at Chicago
- 2012–2015 **BS, Math Comp Sci**, *University of Illinois at Chicago* Summa cum laude. Biology minor.

Experience

NASA Jet Propulsion Laboratory

- 2021-2023 **Visualization Developer**, *NASA JPL* Led communications schedule prototyping for Mars Sample Return. Ran cross-functional design study with key stakeholders, producing Al-supported design tools for operations schedules, used to discuss capabilities under complex threat scenarios.
 - 2021 Data to Discovery CS Lead, NASA JPL

University of California, Santa Cruz

2018-present Doctoral Candidate, UCSC

Developed novel dashboard widgets for MBARI LRAUV operators, supporting their need to train new operators in situational awareness for robotics missions at sea.

2018-2019 Chancellor's Fellow, UCSC

University of Illinois at Chicago

2016-2018 **Graduate Research Assistant**, *UIC* Deployed a JupyterHub notebook server to 30+ users of polynomial homotopy continuation.

Selected Publications

- BELIV 2024 Visualization Artifacts are Boundary Objects Evaluation and Beyond - Methodological Approaches for Visualization, at IEEE VIS
- AERO 2024 Mars Sample Return Surface Relay Planning and Coordination, with Benjamin Donitz and Scott Davidoff IEEE Aerospace Conference
- AIIDE 2023 DendryScope: Narrative Designer Support via Symbolic Analysis, with Autumn Chen and Adam Smith AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment
 - CGF 2019 **IGM-Vis: Analyzing Intergalactic and Circumgalactic Medium Absorption...**, with David Abramov, Cassia Artenagara, and Joe Burchett Computer Graphics Forum
- VISAP 2019 Data Brushes: Interactive Style Transfer, with Mahika Dubey IEEE VIS Arts Program
 - VIS 2019 **RuleVis: Constructing Patterns and Rules for Rule-Based Models**, with the Creative Coding Lab and Pierre Boutillier IEEE Visualization Conference



Professional Service

Co-organizer	10th Experimental AI in Games Workshop (EXAG) at AIIDE 2023
PC member	AAAI AI in Interactive Digital Entertainment (AIIDE) 2023 - 24
PC member	ACM Foundations of Digital Games (FDG) 2024 - 25
Reviewer	ACM Computer-Human Interaction (CHI) 2025

Teaching Experience

- 2021 Visualization Mentor, UCSC Data Visualization Collection, (with NOAA)
- 2020 Teaching Assistant, UCSC
 Game Design Studio capstone: 2 teams of 8 10 students;
 Data Structures for Interactive Media: section of 30 students;
 Games Systems: section of 30 students.
- 2019 Science Internship Mentor, UCSC Mentored high school students developing interpretable AI systems.
- 2018 **SIG Data Organizer**, *ACM@UIC* Led weekly open labs on scientific computing in Python, JavaScript, and Prolog.

Distinctions

- 2023 Nominated for Best Artifact, DendryScope, AIIDE 2023
- 2017 Yeuk-Lam Yau-Leung Memorial Scholarship, in mathematical biology
- 2016 Participant, SMS 2016: Dynamics of Biological Systems, MSRI