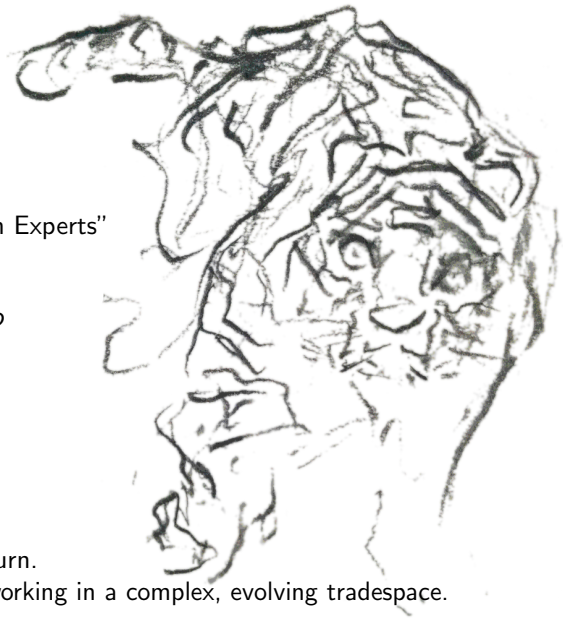
Jasmine T. Otto

Data visualization researcher

jtotto@ucsc.edu
jazztap.github.io
@jazz@vis.social



Education

2018–present **PhD, Computational Media**, *UC Santa Cruz*
"Software Instruments: Creativity Support Tools for Domain 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. Honors thesis in mathematical biology.

Experience

NASA Jet Propulsion Laboratory

2021-2023 **Visualization Developer**, *NASA JPL*
Developed novel visual analytics tools for Mars Sample Return.
Carried out an iterative design study with key stakeholders working in a complex, evolving tradespace.

2021 **Data to Discovery CS Lead**, *NASA JPL*
Created the MarsIPAN schedule viewer for relay pass allocations of the Mars Sample Return mission.

University of California, Santa Cruz

2018-2023 **Doctoral Researcher**, *UCSC*
Developed novel dashboard widgets for MBARI LRAUV operators, supporting situational awareness needs and reducing the cost of onboarding new operators.

2018-2019 **Chancellor's Fellow**, *UCSC*

University of Illinois at Chicago

2016-2018 **Graduate Research Assistant**, *UIC*
Deployed a JupyterHub notebook server to 30+ PHCpack library users.

Publications

AIIDE 2023 **DendryScope: Narrative Designer Support via Symbolic Analysis**, *with Autumn Chen*, Nominated for Best Artifact.
AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment

CasCre 2020 **Entering the Design Space of Digital Portraiture**
Casual Creators Workshop at the International Conference on Computational Creativity

ELO 2020 **Procedural Montage: A Design Trace of Reflection and Refraction**
Electronic Literature Organization Conference

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

SciPy 2019 **Solving Polynomial Systems with phcpy**, *with Jan Verschelde*
Scientific Computing with Python Conference

Teaching

2021 **Visualization Mentor**, *UCSC Data Visualization Collection*
Mentored data analytics work with a NOAA scientist and an undergraduate developer.

2020 **Teaching Assistant**, *UCSC*
Taught lab for Game Design Studio, Data Structures for Interactive Media, and Games Systems.

2019 **Science Internship Mentor**, *UCSC*
Mentored high school students developing explorable explanations.

2018 **SIG Data Organizer**, *ACM@UIC*
Led weekly open labs on selected libraries from SciPy, JavaScript, and Prolog package ecosystems.

Distinctions

2017 **Yeuk-Lam Yau-Leung Memorial Scholarship**, in mathematical biology

2016 **Participant**, *SMS 2016: Dynamics of Biological Systems*, MSRI