Jen Rogers

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RESEARCH FOCUS My research is an articulation between HCI and Visualization. My current work focuses on designing and developing tools to make human-centered processes more transparent and traceable, from human-in-the-loop ML to design studies.

EDUCATION PhD Human Centered Computing

2017-current Scientific Computing and Imaging Institute, University of Utah

2015-2016 MSc Medical Visualization and Human Anatomy

Glasgow School of Art & University of Glasgow, With Distinction

2010-2014 BFA Graphic Design

Montana State University, Highest Honors

SKILLS Skill focus: Visualization. Design and development of web-based tools.

> Qualitative research: contextual and semi structured interviews, open-coding Web development: JavaScript, TypeScript, D3.js, React, Flask, Node.js

Programming: Python, (some) Java Design: Adobe Illustrator, Photoshop, Figma

PROJECTS 2021-current

Trrracer: Tool for Recording a Design-Oriented Research Process

In collaboration with researcher from Univeristy of Edinburgh, School of Information Science, to facilitate transparency and traceability

https://github.com/jrogerthat/trrracer

Skills applied: Python (NLTK, Gensim, Flask), TypeScript, React, Electron

2020 - 2021

Web-based annotation tool for coronavirus cell-entry animations

In collaboration with the Animation Lab, School of Medicine, University of Utah and online community of structural biologists, simulators, and molecular animators.

🏅 https://github.com/visdesignlab/coronavirus_annotation 🔲 animationlab.utah.edu/cova

Skills applied: requirements gathering, semi-structured interviews, mock-ups (Illustrator), web development (JavaScript, D3.js, HTML5, CSS), Python for image data processing

Trevo: Visual tool to identify patterns in phylogenetic tree data

Part of the NSF funded Multinet Graph Project, in collaboration with the University of Idaho and Kitware.

https://vdl.sci.utah.edu/Trevo/ https://github.com/visdesignlab/Trevo

Skills applied: requirements gathering, semi-structured and contextual interviews, mock-ups (Illustrator), web development (JavaScript, D3.js, HTML5, CSS), development of interactive audit trail to trace back design study insights to underlying artifacts.

2018 Composer: Visual cohort comparison tool

In collaboration with the University of Utah Orthopedic Center.

https://github.com/visdesignlab/Composer

Skills applied: requirements gathering, semi-structured interviews, mock-ups (Illustrator), web development (TypeScript, D3.js, HTML5, CSS), Python for data processing

SELECTED EXPERIENCE

Research Assistant, SCI Institute, University of Utah

2017 - current Research in web-based visual applications tailored for biological data at the Scientific Computing and Imaging Institute.

2021 Intern, Tableau Research

Worked on traceability for autoML. Devoloped taxonomy to characterize artifacts emergent from this process and prototype to visualize the attributes, dependencies, and histories of these captured artifacts.

SELECTED EXPERIENCE Publicity and Local Chair BELIV Workshop, IEEE VIS 2020

2020 Assist in the outreach and organization of BELIV workshop at VIS

2019 Visiting Researcher, Harmon Lab, University of Idaho

Worked closely with researchers in comparative evolutionary biology to design and develop a tool for visual analysis of phylogenetic tree data.

2016 Lab at the Loft, Glasgow School of Art / Digital Health and Care Institute,

Experimental hack-a-thon style design workshop to generate ideas for future projects that improve human interaction with assistive healthcare systems in the home.

TEACHING + MENTORSHIP

Teaching Mentor, University of Utah,

2018, 2019 Visualization for Data Science (CS 6591). Organized and ran class labs. Designed and built visualization homework projects to teach Javascript and D3.

Ambassador for Urban Uprising Foundation, Glasgow, UK 2016-2017

Mentor and coach for at risk youth from Ayrshire, UK to develop their foundational skills in climbing and progress toward their NIBAS certification. Organized and participated in sea-stack expedition in Northern Scotland to raise money and awareness for the charity.

* When I am not coding, I am a climbing coach at the local climbing gym

PEER-REVIEWED Rogers, J., Patton, A. Harmon, L. Lex, A. Meyer, M.

PUBLICATIONS Insights From Experiments With Rigor in an EvoBio Design Study

2020 IEEE Transactions on Visualization and Computer Graphics (InfoVis)

2019 Rogers, J., Spina, N., Neese, A., Hess, R., Brodke, D. and Lex, A., 2019. Composer: Visual Cohort Analysis of Patient Outcomes. Applied clinical informatics, 10(02), pp.278-285.

Rogers, J., Spina, N., Neese, A., Hess, R., Brodke, D. and Lex, A., 2018. Composer: Visual Cohort Analysis of Patient Outcomes

Workshop on Visual Analytics in Healthcare at AMIA (VAHC 2018).

SELECTED TALKS + Speaker, Invited Highlight Talk

PRESENTATIONS BioVis@ISMB 2021

Presented work on tRRRace and traceabillity that came from work "Insights 2021 and Experiments with Rigor in an EvoBio Design Study".

2018 Presenter, Workshop for VAHC 2018, San Francisco, CA, United States

VAHC 2018: Visual Analytics in Healthcare

Presented work on "Composer" interactive cohort analysis tool developed in collaboration with the Orthopaedic Research Center, University of Utah

2018 Poster Presenter IEEE VIS 2018, Berlin, Germany

Presented poster for interactive cohort analysis tool developed in collaboration with the Orthopaedic Research Center, University of Utah

2017 Poster Presenter 2017 SIGGRAPH, Los Angeles, California

Presented poster for "Constellations of Movement", an interactive iPad application visualizing research in motor imagery decoding for the Center for Cognitive Neuroscience, University of Glasgow.

2017 Poster Presenter and Student Grant Recipient, 2017 IS&T

International Symposium on Electronic Imaging, Burlingame, California Invited to present interactive poster and speak on project developing interactive application to visualize research in motor imagery decoding.

Invited Speaker Duke of Edinburgh Award Ceremony, Glasgow, UK

Invited to speak to the attending body of the Duke of Edinburgh award ceremony on our climbing expedition to raise money and awareness for Urban Uprising Foundation.

HONORS + SCHOLARSHIPS Student Grant Recipient 2017 IS&T

Glasgow School of Art Governors International Postgraduate Scholarship, 2015

Montana State University Freshman Merit Scholarship, 2010