



SKILLS

ux research
ui/ux design
web app design
graphic design
data visualization
rapid prototyping
wireframing

TOOLS

sketch
principle
adobe suite
d3.js

LANGUAGES

python
R
javascript
html
css
java

AWARDS

NLM Training Grant
2009 : 2015
Sol Siegal Scholarship
Program
2005 : 2007

EXPERIENCE

UI/UX RESEARCH SCIENTIST 2015 : CURRENT

VISUAL ANALYTICS, PACIFIC NORTHWEST NATIONAL LAB

SELECTED PROJECTS & RESPONSIBILITIES

SHARKZOR

HUMAN IN THE LOOP ML FOR USER-DEFINED IMAGE CLASSIFICATION
UX DESIGN
UI DESIGN
BRANDING
USER EVALUATION DESIGN
STAKEHOLDER PRESENTATION
DEMONSTRATION
PUBLICATION

STORYLINES

ABSTRACTION-BASED VISUALIZATION FOR SPACIOTEMPORAL DATA
UX DESIGN
UI DESIGN
USER EVALUATION DESIGN
PUBLICATION

GRADUATE RESEARCH ASSISTANT 2010 : 2015

UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

DISSERTATION

EFFECTIVE DATA VISUALIZATION FOR
COMMUNICATION AND ANALYSIS OF MICROBIOME DATA

EDUCATION

PHD COMPUTATIONAL BIOSCIENCE 2015

UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

BS COMPUTER SCIENCE 2008

BOWLING GREEN STATE UNIVERSITY

MEGANAP@GMAIL.COM

216.526.8802



/ PUBLICATIONS

- **SHARKZOR: Human in the Loop ML for User-Defined Image Classification**; Pirrung M A, Hilliard N, O'Brien N, Yankov A, Corley C, Hodas N. (IUI 2018)
- **Sharkzor: Interactive Deep Learning for Image Triage, Sort and Summary**; Pirrung M A, Hilliard N, Yankov A, O'Brien N, Weidert P, Corley C, Hodas N. (arXiv 2018)
- **FOC Dashboard: integrates FastQC results into a web-based, interactive, and extensible FASTQ quality control tool**; Brown J, Pirrung M A, McCue L. (Bioinformatics 2017)
- **Toward a visualization-supported workflow for cyber alert management using threat models and human-centered design**; Franklin, L; Pirrung, M A; Blaha, L; Dowling, M; Feng, M. (VizSec Symposium 2017)
- **NOUS: Construction and Querying of Dynamic Knowledge Graphs**; Choudhury S, Agarwal K, Purohit S, Zhang B, Pirrung M A, Smith W P, Thomas M. (DESWeb 2017)
- **Studying Military Community Health, Well-being, and Discourse through the Social Media Lens**; Pavalanathan U, Datla V V, Volkova S, Charles-Smith L E, Pirrung M A, Harrison J J, Chappell A R, Corley C D. *Lecture Notes in Computer Science*
- **Discourse, Health and Well-being of Military Populations through the Social Media Lens**; Pavalanathan U, Datla V V, Volkova S, Charles-Smith L E, Pirrung M A, Harrison J J, Chappell A R, Corley C D. (AAAI 2016)
- **NOUS: From Text to Answers via Domain Specialized Knowledge Graphs**; Choudhury S, Agarwal K, Purohit S, Pesantez P, Zhang B, Pirrung M A, Praggastis B L. (SIGMOD 2016)
- **Explanatory Stream Analysis: Design and Evaluation of an Abstraction-Based Visualization Framework**; Arendt D L, Dasgupta A, Pirrung M A, Han K, Scholtz J. (IEEE VAST 2016)
- **Getting to the Real Story: Exploring Spatiotemporal Behavior at Multiple Time Scales with Storyline Visualization**; Arendt D L, Pirrung M A, Han K. (IEEE VAST 2016)
- **Bacteria from Diverse Habitats Colonize and Compete in the Mouse Gut**; Seedorf et al. (Cell 2014)
- **EMPeror: a tool for visualizing high-throughput microbial community data**; Vázquez-Baeza Y, Pirrung M, Gonzalez A, Knight R. (Gigascience 2013)
- **Evidence for a persistent microbial seed bank throughout the global ocean**; Gibbons SM, Caporaso JG, Pirrung M, Field D, Knight R, Gilbert JA. (Proc Natl Acad Sci 2013)
- **TopiaryExplorer: An application for connecting large phylogenetic trees to environmental metadata**; Meg Pirrung, Ryan Kennedy, J. Gregory Caporaso, Jesse Stombaugh, Doug Wendel, and Rob Knight (Bioinformatics 2011)
- **QIIME allows analysis of high-throughput community sequencing data**; Caporaso et al. (Nat Methods 2010)

/ PRESENTATIONS

- **SHARKZOR: Human in the Loop ML for User-Defined Image Classification**; IUI 2018 Demonstration, Tokyo Japan
- **Sharkzor: Interactive Deep Learning for Image Triage, Sort and Summary**; NIPS 2017 Demonstration, Long Beach CA
- **An Analysis Pipeline for Visualizing Behavioral Patterns at Multiple Timescales with Storylines** UW Data Science Poster and Networking Session 2016, Seattle, WA
- **The Science of Design** SEDP Poster Session 2016, Richland, WA
- **Visualizing Microbiome Data for Scientific Analysis & Communication** IEEEVIS Doctoral Colloquium 2014, Paris, France. talk and poster presentation
- **Experimental Determination of Useful and Informative Visualizations of Microbial Ecology Data for Public and Scientific Audiences** ROCKY 2013, Snowmass, Colorado. talk and poster presentation
- **Experimental Determination of Useful and Informative Visualizations of Microbial Ecology Data for Public and Scientific Audiences** BioVis 2013, Atlanta, Georgia. poster presentation
- **Envobe** Open Hardware Summit 2012, NYC, New York. talk
- **TopiaryExplorer** VIZBI 2011, Boston, Massachusetts. poster presentation
- **TopiaryExplorer** ROCKY 2010, Snowmass, Colorado. poster presentation