Haihan Lin

(651) 242-0885 • haihan.lin.7@gmail.com • haihan-lin.github.io

Education

University of Utah, Salt Lake City, UT — August 2018 - Present
Degree: Doctor of Philosophy
Major: Computing
GPA: 3.98
Research Area: Data visualization, human-computer interaction

Macalester College, Saint Paul, — September 2014 - May 2018
Degree: Bachelor of Arts
Majors: Computer Science and Mathematics
GPA: 3.93
Honor: Dean's List each semester from Spring 2015 to May 2018

Publications

Sanguine: Visual Analysis for Patient Blood Management
Information Visualization, vol. 20, no. 2-3, July 2021, pp. 123-137, doi: 10.1177/14738716211028565
Haihan Lin, Ryan A. Metcalf, Jack Wilburn, Alexander Lex

Clipped Graphs: A Compact Time Series Encoding
Proceedings of the IEEE Information Visualization Conference – Posters (InfoVis '19), October 2019
Haihan Lin, Carolina Nobre, Amanda Bakian, Alexander Lex

Preprints

Data Hunches: Incorporating Personal Knowledge into Visualizations
arXiv:2109.07035 [cs], Sep. 2021. Available: http://arxiv.org/abs/2109.07035
Haihan Lin, Derya Akbaba, Miriah Meyer, Alexander Lex

Research Projects

Visualization Tool for Investigating Social Network Structures — Oct 2021 - Present

- In collaboration with population scientists at the University of Utah studying the Utah Population Database
- Currently prototyping and developing a visualization tool for viewing and comparing social network structures at scale.

Personal Knowledge and Interpretation of Data — Nov 2020 - Present

- The project focuses on how personal knowledge can be formally used as a source of knowledge when interpretation data.

Visualization Tool for Optimizing Patient Blood Management July 2019 - Present

- In collaboration with the ARUP laboratories at the University of Utah
- Design and developed a visualization tool for surgeons on optimizing transfusion and achieving better patient outcomes, using React framework, typescript, and D3.

Honors Project, Macalester College, Saint Paul, MN June 2017 - February 2018

- Developed code to compare three surface reconstruction algorithms' performances on Kinect
- Integrated the algorithms into one application to conduct mesh reconstruction

Related Experience

Research Assistant, University of Utah, Salt Lake City, UT January 2019 - Present

- Advised by Alexander Lex at Visualization Design Lab
- Worked with psychiatrists, physicians, and population scientists on developing customized visualization tools to study their domain data.
- Developed various web data visualization projects using React, Vue, D3, and TypeScript.
- Conducted workshops on collecting requirements and expectations for visualization tools.

MinneMUDAC 2016, Eden Prairie, MN November 2016

Finalist

- Competed in MinneAnalytic's MinneMUDAC: Dive Into Water Data as a team of five students
- Offered insights to the judges on how characteristics of properties affect water quality
- Co-presented findings and recommendations at the MinneMUDAC's final round

SaveryEats, Saint Paul, MN February 2016 - August 2016

Developer and Graphic Designer

- Participated in Macathon (Macalester Hackathon/Startup Competition) and MacStartup Program
- SaveryEats focuses on reducing food waste by providing real-time, dynamic discounts on surplus inventory
- Conducted user experiments, and presented during Twin Cities Startup Week

Path2Success, Macalester College, Saint Paul, MN January 2016 - May 2016

Developer

- Developed an Android App with other two students
- Path2Success is a native Android App that allows users to input and track goals
- Used Java and Android Studio to develop front-end section

Skills

Computer: TypeScript, D3, Vue, React, JavaScript, Python
Language: Fluent in English and Chinese