# **DEVIN LANGE**

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## **EDUCATION**

University of Utah, Salt Lake City, Utah

Fall 2019 – Present

Ph.D. student researching visualization systems advised by Dr. Alexander Lex

University of Minnesota, Minneapolis, Minnesota

2012 - 2016

B.S. in Computer Science, with minor in Mathematics, summa cum laude

## **★** Awards and Honors

Honorable Mention for Best Paper Award, IEEE Vis	2021
Honorable Mention for Best Abstract Award, BioVis	2021
Shane Robison Fellowship, University of Utah	2019
Presidential Scholarship, University of Minnesota	2012

# Publications and Preprints

★ Loon: Using Exemplars to Visualize Large-Scale Microscopy Data. IEEE Transactions on Visualization and Computer Graphics (Proceedings of VIS), Preprint DOI: 10.31219/osf.io/dfajc 2021

Devin Lange, Eddie Polanco, Robert Judson-Torres, Thomas Zangle, Alexander Lex loon.sci.utah.edu Ogithub.com/visdesignlab/Loon

Trajectory Mapper: Interactive Widgets and Artist-Designed Encodings for Visualizing Multivariate Trajectory Data. In Proceedings of EuroVis Conference (Short Papers), DOI:

10.2312/eurovisshort.20171141

2017

Devin Lange, Francesca Samsel, Ioannis Karamouzas, Stephen J. Guy, Rodney Dockter, Timothy M. Kowalewski, Daniel F. Keefe

Optimization-based computation of locomotion trajectories for Crowd Patches. In Proceedings of the Seventh International Conference on Motion in Games, 7–16, DOI: 10.1145/2668064.2668094 2014 Jose Guillermo Rangel Ramirez, Devin Lange, Panayiotis Charalambous, Claudia Esteves and Julien Pettré

#### PROFESSIONAL EXPERIENCE

#### Software Developer, Epic Systems Corporation, Wisconsin

2016 - 2019

- Lead Developer on a 10,000+ hour project to create a tool for reviewing medical result data.
- Organized brain trust to get input from physician leads across many organizations.
- Created and taught learnToCode advanced class after hours to coworkers.

#### Research Assistant for Dr. Daniel Keefe, University of Minnesota

2015 - 2016

- Developed an open-source application in C++ for viewing and analyzing multivariate trajectory data.
- Created framework to aid in the development of future linking and brushing applications.

# Research Assistant for Dr. Julian Pettré, INRIA, France

Summer of 2014

- Created and implemented an algorithm to compute locomotion trajectories for the Crowd Patches project.
- Created visualization for video, diagrams, and assisted with paper for publication

# Research Assistant for Dr. Stephen J. Guy, University of Minnesota

Summer of 2013

- Created pipeline to do offline rendering of crowd simulations using Python and Mitsuba.
- Developed a motion control system for quadcopters in Python.

# **◊** TEACHING

## Teaching Assistant for Data Science, University of Utah

Spring 2021

• Homework creation, grading, office hours, lecture

#### Teaching Assistant for Data Visualization, University of Utah

Fall 2020

• Homework creation, grading, office hours, lecture

#### Teaching Assistant for Honors Intro to Computer Science, University of Minnesota

Fall 2013

• Homework creation, grading, office hours,

#### PRESENTATIONS

# Loon: Using Exemplars to Visualize Large-Scale Microscopy Data

- <u>Invited Talk</u>, Department Of Biomedical Informatics, Harvard Medical School, Boston, MA, (virtual) May 12, 2021
- Paper Talk, BioVis, Virtual, July 27, 2021

# Trajectory Mapper: Interactive Widgets and Artist-Designed Encodings for Visualizing Multivariate Trajectory Data

- Paper Talk, EuroVis 2017, Barcelona, Spain, June 2017
- <u>Undergraduate Honors Thesis</u>, Department of Computer Science, University of Minnesota, Minneapolis, MN, May, 2016

# </> PROGRAMMING EXPERIENCE

Typescript, Javascript, CSS, HTML, Python	5+ years
D3, C#, M, C++	3 years
Vega-Lite, Matplotlib, GLSL, C, MATLAB, Java, Processing, PHP, SQL, Scheme, Lisp	<1 year

# **★** SERVICE

President of Graduate Student Advisor Committee, University of Utah

2020 - Present