# **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 (top 20 paper out of 445 submissions), 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)

DOI: 10.1109/TVCG.2021.3114766

Devin Lange, Eddie Polanco, Robert Judson-Torres, Thomas Zangle, Alexander Lex

★ Honorable Mention Award · % loon.sci.utah.edu · ۞ github.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

| Guest Lecturer for Software Practice, University of Utah                         | Fall 2021   |
|--|-------------|
| Teaching Assistant for Data Science, University of Utah                          | Spring 2021 |
| Teaching Assistant for Data Visualization, University of Utah                    | Fall 2020   |
| Teaching Assistant for Honors Intro to Computer Science, University of Minnesota | Fall 2013   |
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## PRESENTATIONS

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

- Paper Talk, IEEE VIS, Virtual, October 29, 2021
- Invited Talk, BioVis at ISCB, Virtual, July 27, 2021
- Invited Talk, Department of Biomedical Informatics, Harvard Medical School, Boston, MA, (virtual) May 12, 2021

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

• Paper Talk, EuroVis 2017, Barcelona, Spain, June 2017

President of Graduate Student Advisory Committee, University of Utah

• Undergraduate Honors Thesis, Department of Computer Science, University of Minnesota, Minneapolis, MN, May, 2016

#### </> PROGRAMMING EXPERIENCE

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

2020 - 2021