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 Award, IEEE Vis — 2021
Honorable Mention 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.** (*To Appear*) 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 · 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

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

- Invited Talk, 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
- Undergraduate Honors Thesis, 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