Zhimin Li

Personal Info

ADDRESS: 72 Central Campus Dr, Salt Lake City, UT 84112
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Research Interest

Machine Learning, Data Visualization, High Performance Computing

Work Experience

Current Aug 2016	Research Assistant at University of Utah *Design Visualization Systems for Explainable AI, HPC System Fault Tolerance Analysis*
Aug 2018-2019 May 2018-2019	Internship at Lawrence Livermore National Lab *Design Visualization System to Analyze Silent Error In HPC System*
Aug 2016 May 2016	Internship at Lawrence Livermore National Lab *Design a visualization system to Analyze High Dimensional Data*
Dec 2015 Jan 2014	Undergraduate Research Assistant at University of Utah *Analyze High Dimensional Data*

Education

Aug 2016 - Current	Ph.d in Computer Science **University of Utah**
Sep 2012- Dec 2015	Undergraduate Degree in Computer Science **University of Utah** Bachelor Thesis: "G-MAP: A High Dimension Data Grand Tour Map"
Sep 2012 - Dec 2015	Undergraduate Degree in Applied Mathematics **University of Utah**

Publication

"Understanding Robustness Lottery": A Geometric Visual Comparative Analysis of Neural Network Pruning Approaches *(IEEE Transactions on Visualization and Computer Graphics 20230* (Under Submission) (video, paper)
Zhimin Li, Shusen Liu, Xin Yu, Kailkhura Bhavya, Jie Cao, Diffenderfer James Daniel, Peer-Timo Bremer,and Valerio Pascucci

A Visual Comparison of Silent Error Propagation *(IEEE Transactions on Visualization and Computer Graphics 2022)* (video, paper)

Zhimin Li, Harshitha Menon, Kathryn Mohror, Shusen Liu, Luan zheng Guo, Peer-Timo Bremer,and Valerio Pascucci

Understanding a Program's Resiliency Through Error Propagation (PPOPP 2021) (video, paper)
Zhimin Li, Harshitha Menon, Kathryn Mohror, Yarden Livnat, Peer-Timo Bremer,and Valerio Pascucci

SpotSDC: Revealing the Silent Data Corruption Propagation in High-Performance Computing Systems *(IEEE Transactions on Visualization and Computer Graphics 2020)*(video, paper)
Zhimin Li, Harshitha Menon, Dan Maljovec, Yarden Livnat,Shusen Liu,Kathryn Mohror,Peer-Timo Bremer,and Valerio Pascucci

NLIZE: A Perturbation-Driven Visual Interrogation Tool for Analyzing and Interpreting Natural Language Inference Model(*IEEE Transactions on Visualization and Computer Graphics – IEEE VIS 2018)* (video, paper)
Shusen Liu, **Zhimin Li**, Tao Li, Vivek Srikumar, Valerio Pascucci and Peer-Timo Bremer

Visual Interrogation of Attention-Based Models for Natural Language Inference and Machine Comprehension, *The 2018 Conference on Empirical Methods in Natural Language Processing*(paper)
Shusen Liu, Tao, Li, **Zhimin Li**, Vivek Srikumar, Valerio Pascucci, and Peer-Timo Bremer .

Grand-Map: A High Dimensional Grand Tour Map (Utah UROP 2016)
Zhimin Li

An Information Visualization System to Analyze Silent Data Corruption (SC 2018)(poster)
Zhimin Li, Harshitha Menon, Yarden Livnat, Kathryn Mohror, Valerio Pascucci

Why and when do Students change Majors? 2015 IEEE VGTC VPG Data-Visualization Contest (VIS 2015 Demo)
Zhimin Li, Alexander lex

Teaching Experience

Aug - Dec 2017 and 2018	*CS6962 Programming For Engineer*
Jan - Feb 2016	*CS4150 Algorithm*
Aug - Dec 2015	*CS3100 Models Of Computation*

Scholarships and Certificates

2022 Academic Year	IEEE E-science 18th Conference 2022 traveling scholarship
2015 Academic Year	KLW Artificial/Machine Learning scholarship
2015 Academic Year	C.M. Collins Endowed Scholarship

Community Service

SC 2021, IEEE VIS 2021-2023, Pacific VIS 2022 Reviewer,
IEEE VIS 2020 Volunteer
ACM SIGMOD/PODS 2014 Volunteer
Member of Pi Mu Epsilon (Honorary national mathematics society)

Programming Experience

Java, Javascript, C++, C#, Python