

# Mingwei Li

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Department of Computer Science  
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## Education **University of Arizona**

Doctor of Philosophy in Computer Science, 2016-2021.  
Fields: Data Visualization, Machine Learning  
Minor: Mathematics  
Advisor: Prof. Carlos Scheidegger  
GPA: 4.0/4.0

## **Hong Kong University of Science and Technology**

Bachelor of Engineering, Honor Research Program, 2015  
Major: Electronic Engineering  
Minor: Mathematics  
Thesis: Wi-Fi based Indoor Localization  
Advisor: Prof. Shenghui Song  
GPA: 3.682/4.3

## Teaching **Department of Computer Science, University of Arizona**

Teaching Assistant, CSC 245, Introduction to Discrete Structures, Summer 2018  
Teaching Assistant, CSC 337, Web Programming, Fall 2016

## **Department of Electronic and Computer Engineering, HKUST**

Student Helper, ELEC 1100, Introduction of Robotics, Fall 2012

## Awards and **GPSC Travel Grant**

Fellowships University of Arizona, Oct 2018

## **Graduate Assistantship, Department of Computer Science**

University of Arizona, 2016-2021

## **Dean's List, School of Engineering**

Hong Kong University of Science and Technology, 2011-2014

## **Scholarship for Continuing Undergraduate Students**

Hong Kong University of Science and Technology, 2011-2014

## Publications **Graph Drawing, 2020-Current**

[Best Paper Award] Ahmed R, De Luca F, Devkota S, Kobourov S, Li M. Graph Drawing via Gradient Descent,  $(GD)^2$ . arXiv preprint arXiv:2008.05584. 2020 Aug 12.

## **Deep Learning Visualization, 2017-Current**

[Best Submission Award] M. Li, and C. Scheidegger. Toward Comparing DNNs with UMAP Tour. VISxAI workshop, IEEE VIS 2020. Available at <https://tiga1231.github.io/umap-tour/>

M. Li, Z. Zhao, and C. Scheidegger. Visualizing Neural Networks with the Grand Tour. Distill.pub, 2020. Available at <https://distill.pub/2020/grand-tour/>

M. Li, Z. Zhao, C. Scheidegger. Visualizing Neuron Activations with the Grand Tour. Proceedings of the Workshop on Visualization for AI (VISxAI), 2018.

Z. Wang, D. Cashman, M. Li and J. Li, M. Berger, J. A. Levine, R. Chang, C. Scheidegger. NNCubes: Learned Structures for Visual Data Exploration. arXiv preprint arXiv:1808.08983 (2018)

## **Perception in Visualization, Algebraic Visualization, 2018-2019**

M. Correll, M. Li, G. Kindlmann, and C. Scheidegger. Looks Good to Me: Visualizations as Sanity Checks. IEEE Transactions in Visualization and Computer Graphics (Proceedings of InfoVis), 2018.

## **Genome Data Visualization, 2016-2017**

M. Li, A. C. Siri, A. K. Haug-Baltzell, E. Lyons, and C. Scheidegger. SynMapN: Interactive Visual Comparison for Multiple Genomes. IEEE Transactions in Visualization and Computer Graphics (Posters of IEEE InfoVis), 2017.

## **Indoor Localization, 2012-2014**

M. Li, S. H. Song. Wi-Fi Based Indoor Localization. Undergraduate Research Opportunity Program (UROP). Department of Electronic and Computer Engineering, HKUST.

**Skills** Python (PyTorch, Tensorflow, Numpy, Flask)  
Javascript (D3.js), WebGL, HTML&CSS  
Matlab, Latex