

CHEN CHEN

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RESEARCH INTERESTS

Low-Code / No-Code Approaches for Data Visualization and Exploratory Data Analysis, AI-empowered Automatic Visualization Analysis and Understanding.

EDUCATION

University of Maryland, MD, USA
PhD student in Computer Science

09/2019 - present
Advisor: [Zhicheng Liu](#)

University of Chinese Academy of Sciences & ShanghaiTech University, Shanghai, China
Master of Science in Engineering, Communication and Information Systems

09/2016 - 06/2019
Advisor: [Qifeng Liao](#)

HeFei University of Technology, HeFei, China
Bachelor of Science, Mathematics and Applied Mathematics

09/2012 - 06/2016

PUBLICATIONS

Chen Chen, Zhicheng Liu. *The State of the Art in Creating Visualization Corpora for Automated Chart Analysis*. EuroVis 2023 (STAR track). [AR \approx 31%]

Zhicheng Liu, **Chen Chen**, Francisco Morales, Yishan Zhao. *Atlas: Grammar-based Procedural Generation of Data Visualizations*. IEEE VIS 2021 (short paper track). [AR \approx 29%]

Chen Chen, Qifeng Liao. *ANOVA Gaussian process modeling for high-dimensional stochastic computational models*. Journal of Computational Physics, 2020.

RESEARCH EXPERIENCE

Research Assistant, University of Maryland

02/2021 - present

Advisor: [Zhicheng Liu](#)

We study scalable visualization tools and systems for broader audiences in general. Examples include:

1. *Mascot*, a visualization grammar for procedural data-driven chart generalization ([DOI](#), [project website](#));
2. *Mystique*, an authoring tool for reusing SVG data visualizations (under review);
3. A state-of-the-art survey on chart corpora in automated chart analysis research ([Preprint](#)).

Research Scientist Intern, Adobe Inc.

05/2022 - 08/2021

Advisor: [Jane Hoffswell](#), [Shunan Guo](#), [Fan Du](#), [Ryan A. Rossi](#), [Gromit Yeuk-Yin Chan](#)

We studied improving the user experience of notebook-based exploratory data analysis (under review).

Research Assistant, University of Maryland

06/2020 - 01/2021

Advisor: [Furong Huang](#)

We studied example-wise randomized smoothing to boost accuracy&robustness for neural networks ([arXiv](#)).

Research Assistant, ShanghaiTech University

09/2016 - 06/2019

Advisor: [Qifeng Liao](#)

We proposed a learning-based method for solving PDEs with Gaussian Process ([DOI](#)).

SELECTED PROJECTS

A Visual Tour to Empirical Neural Network Robustness

09/2021 - 12/2021

We developed a narrative visualization article to convey several key concepts regarding neural network robustness ([demo](#)). I led regular meetings discussing overall visualization designs, prepared needed dataset (including training models and recording statistics using PyTorch), and implemented the front-end website.

AWARDS

- **Merit Student Award**, University of Chinese Academy of Sciences (2018)
- **Outstanding Graduate of Anhui Province** (Top 3%, 2016)
- **Outstanding Graduate of Hefei University of Technology** (Top 10%, 2016)
- **Undergraduate National Scholarship**, HeFei University of Technology (Top 1%, 2012-2014)
- **Merit Student Award**, HeFei University of Technology (2012-2014)

SKILLS

JavaScript, HTML, CSS, React, Python, PyTorch, L^AT_EX.