

CHEN CHEN

8125 Paint Branch Drive, College Park, MD, 20742, United States

cchen24@umd.edu | (+1) 240 413 0916 | <https://ccdtc.cc>

RESEARCH INTERESTS

Data Visualization Grammar and Authoring Systems, Human-Data Interaction, Interactive Exploratory Data Analysis, Human-Centered AI, Human-Computer Interaction.

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

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
Advisor: [Zhicheng Liu](#)

02/2021 - present

We study scalable visualization systems for broader audiences in general; examples are:

1. *Atlas*, a concise visualization grammar for procedural data-driven chart generalization ([project website](#));
2. *Mystique*, an interactive authoring tool for building expressive bar charts using examples (under submission);
3. An in-depth survey and analysis on visualization datasets (ongoing).

Research Scientist Intern, Adobe Inc.

05/2022 - 08/2021

Advisor: *Jane Hoffswell, Shunan Guo, Ryan A. Rossi, Gromit Yeuk-Yin Chan*

We study notebook-based data exploration analysis (ongoing).

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 ([preprint](#)).

Research Assistant, ShanghaiTech University

09/2016 - 06/2019

Advisor: *Qifeng Liao*

We proposed a learning-based method for solving PDEs with Gaussian Process and ANOVA decomposition.

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, Python, React, HTML, CSS, \LaTeX .