

Dongyu Liu

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PROFESSIONAL EXPERIENCE

- Jul 2023 - **Assistant Professor**, UC Davis
Present *Department of Computer Science, College of Engineering*
- Sep 2019 - **Postdoctoral Associate**, MIT
Mar 2023 *Data-to-AI group, with Kalyan Veeramachaneni*
- Aug 2014 - **Research Assistant**, Hong Kong University of Science and Technology
Aug 2019 *VISLab, with Huamin Qu*
- Sep 2017 - **Research Intern**, Bosch Research
Apr 2018 *Human-Machine Intelligence Group, with PanPan Xu and Liu Ren*
- Jul 2016 - **Research Intern**, Microsoft Research Asia
Apr 2017 *Internet Graphics Group, with Weiwei Cui*
- Summer 2016 **Research Intern**, Tencent
WeChat Technical Architecture Group
- 2012—16 **Research Assistant**, Zhejiang University
Visiting Graduate (15-16), Interactive Data Group, with Yingcai Wu
Undergraduate (12-14), State Key Lab of CAD&CG, with Hongxin Zhang
Undergraduate (12-14), EAGLE Lab, with Jiajun Bu

EDUCATION

- 2014—19 **Ph.D. in Computer Science & Engineering**
Hong Kong University of Science and Technology, Hong Kong
Thesis: Combining Automated Analysis with Interactive Vis for Spatio-temporal Data Analysis
Advisor: Huamin Qu
Committee: Pedro Sander, Yangqiu Song, Zhongming Lu, Claudio Silva
- 2010—14 **B.Eng. in Computer Science and Technology**
Zhejiang University, Hangzhou, China
Thesis: The Design and Implementation of an Intelligent and Emotional Chatbot
Advisor: Jiajun Bu
 Completed the Chu Kochen Honors Program

HONORS & AWARDS

- 2021 IEEE VIS Best Paper Honorable Mention Award
- 2020 Finalist of the HKUST SENG PhD Research Excellence Award
Only 3 from more than 200 PhD graduates in the School of Engineering 2019-20.
- 2018 IEEE VIS (VAST) Best Paper Award

- 2014—18 Hong Kong PhD Fellowship Scheme (≈120,000 USD)
A highly prestigious and competitive fellowship established by the Hong Kong RGC.
- 2018 Overseas Research Award (≈6,000 USD)
- 2017 Stars of Tomorrow (Award of Excellent Intern), Microsoft Research Asia
- 2017 Excellent Oral Presentation Award in ZJU International Doctoral Students Conference.
- 2015 Honorable Mention Award at IEEE VAST Grand Challenge
- 2015 Merit Award in E-Learning at The Asia Pacific ICT Alliance (APICTA)
- 2014 Zhejiang University Outstanding Dissertation Award
- 2013 Awardee of Zhejiang Provincial College Students' Science and Technology Innovation Program
- 2013 Honorable Mention Award in COMAP's Mathematical Contest in Modeling
- 2012 Honorable Mention Award in CSIAM's Undergraduate Mathematical Contest in Modeling
- 2012 Awardee of National Undergraduate Training Program for Innovation and Entrepreneurship
- 2009 First Prize in National Olympiad in Informatics in Provinces
Top 1 out of ~5k participants in Fujian Province and top 5 out of ~80k participants in China.

RESEARCH FUNDING

- 2026 **CITRIS Seed Award.** PIs: Dongyu Liu and Lihong Mo, \$60k
Point-of-care Cardiovascular Assessment for Earlier Detection of Preeclampsia and Heart Failure in at-risk Pregnant Patients
- 2025 **Bosch Research Award.** PI: Dongyu Liu, \$75k
UI Understanding and Adaptive Learning with Multimodal LLMs
- 2024—27 **NSF IIS:Small**, #2427770. PI: Kwan-Liu Ma, co-PI: Dongyu Liu, \$600k
Communicating and Resolving Ambiguity in Collaborative Visual Analytics
- 2024 **Bosch Research Award.** PI: Dongyu Liu, \$55k
GenAI Native UIs for Advanced Data Analytics

PUBLICATIONS

* indicates equal contribution.

JOURNAL PAPERS

- 2026 [J1] **SigTime: Learning and Visually Explaining Time Series Signatures**
Yu-Chia Huang, Juntong Chen, **Dongyu Liu**, and Kwan-Liu Ma
TVCG IEEE Transactions on Visualization and Computer Graphics, 2026.
- 2025 [J2] **EMINDS: Understanding User Behavior Progression for Mental Health Exploration on Social Media**
Rui Sheng, Yifang Wang, Xingbo Wang, Shun Dai, Qingyu Guo, Tai-Quan Peng, Huamin Qu, **Dongyu Liu**
TVCG IEEE Transactions on Visualization and Computer Graphics, 2025.
- [J3] **T-Foresight: Interpret moving strategies based on context-aware trajectory prediction**
Yueqiao Chen, Jiang Wu, Yingcai Wu, **Dongyu Liu**
VI Visual Informatics, 2025.
- [J4] **ClimateSOM: A Visual Analysis Workflow for Climate Ensemble Datasets**
Yuya Kawakami, Daniel Cayan, **Dongyu Liu**, Kwan-Liu Ma

TVCG IEEE Transactions on Visualization and Computer Graphics, 2025.

[J5] **Save It for the "Hot" Day: An LLM-Empowered Visual Analytics System for Heat Risk Management**

Haobo Li, Wong Kam-Kwai, Yan Luo, Juntong Chen, Chengzhong Liu, Yaxuan Zhang, Alexis Kai Hon Lau, Huamin Qu, **Dongyu Liu**

TVCG IEEE Transactions on Visualization and Computer Graphics, 2025.

[J6] **InterChat: Enhancing Generative Visual Analytics using Multimodal Interactions**

Juntong Chen, Jiang Wu, Jiajing Guo, Vikram Mohanty, Xueming Li, Jorge Piazzentin Ono, Wenbin He, Liu Ren, **Dongyu Liu**

CGF Computer Graphics Forum.

> *Special Issue: Proceedings of EuroVis 2025.*

[J7] **InclusiViz: Visual Analytics of Human Mobility Data for Understanding and Mitigating Urban Segregation**

Yue Yu, Yifang Wang, Yongjun Zhang, Huamin Qu, **Dongyu Liu**

TVCG IEEE Transactions on Visualization and Computer Graphics.

> *Special Issue: Proceedings of IEEE PacificVis 2025.*

2024 [J8] **Towards Dataset-scale and Feature-oriented Evaluation of Text Summarization in Large Language Model Prompts**

Sam Yu-Te Lee, Aryaman Bahukhandi, **Dongyu Liu**, Kwan-Liu Ma

TVCG IEEE Transactions on Visualization and Computer Graphics.

> *Special Issue: Proceedings of IEEE VIS 2024.*

[J9] **SpreadLine: Visualizing Egocentric Dynamic Influence**

Yun-Hsin Kuo, **Dongyu Liu**, Kwan-Liu Ma

TVCG IEEE Transactions on Visualization and Computer Graphics.

> *Special Issue: Proceedings of IEEE VIS 2024.*

2022 [J10] **RASIPAM: Interactive Pattern Mining of Multivariate Event Sequences in Racket Sports**

Jiang Wu, **Dongyu Liu**, Ziyang Guo, Yingcai Wu

TVCG IEEE Transactions on Visualization and Computer Graphics.

> *Special Issue: Proceedings of IEEE VIS 2022.*

[J11] **The Need for Interpretable Features: Motivation and Taxonomy**

Alexandra ZYTEK, Ignacio Arnaldo, **Dongyu Liu**, Laure Berti-Equille, Kalyan Veeramachaneni

SIGKDD ACM SIGKDD Explorations Newsletter, 2022.

[J12] **MTV: Visual Analytics for Detecting, Investigating, and Annotating Anomalies in Multivariate Time Series**

Dongyu Liu, Sarah Alnegheimish, Alexandra ZYTEK, and Kalyan Veeramachaneni

PACMHCI Proceedings of the ACM on Human-Computer Interaction, 2022.

> *Special Issue: Proceedings of ACM CSCW 2022.*

2021 [J13] **VBridge: Connecting the Dots Between Features and Data to Explain Healthcare Models**

Furui Cheng, **Dongyu Liu**, Fan Du, Yanna Lin, Alexandra ZYTEK, Haomin Li, Huamin Qu, Kalyan Veeramachaneni

TVCG IEEE Transactions on Visualization and Computer Graphics, 2022.

> *Special Issue: Proceedings of IEEE VIS 2021.*

🏆 **Best Paper Honorable Mention (top 5%)**

[J14] **Sibyl: Understanding and Addressing the Usability Challenges of Machine Learning In High-Stakes Decision Making**

Alexandra ZYTEK, **Dongyu Liu**, Rhema Vaithianathan, Kalyan Veeramachaneni

TVCG IEEE Transactions on Visualization and Computer Graphics, 2022.

> *Special Issue: Proceedings of IEEE VIS 2021.*

[J15] **TacticFlow: Visual Analytics of Ever-Changing Tactics in Racket Sports**

Jiang Wu, **Dongyu Liu**, Ziyang Guo, Qingyang Xu, Yingcai Wu

TVCG IEEE Transactions on Visualization and Computer Graphics, 2022.

> *Special Issue: Proceedings of IEEE VIS 2021.*

- [J16] **MIG-Viewer: Visual Analytics of Soccer Player Migration**
Anqi Cao, Xiao Xie, Ji Lan, Huihua Lu, Xinli Hou, Jiachen Wang, Hui Zhang, **Dongyu Liu**, Yingcai Wu
VI Visual Informatics, 2021.
- 2018 [J17] **TPFlow: Progressive Partition and Multidimensional Pattern Extraction for Large-Scale Spatio-Temporal Data Analysis**
Dongyu Liu, Panpan Xu, Liu Ren
TVCG IEEE Transactions on Visualization and Computer Graphics, 2019.
> *Special Issue: Proceedings of IEEE VIS 2018 - VAST Track.*
 [Best Paper Award \(Top 1\)](#)
- [J18] **DeepTracker: Visualizing the Training Process of Convolutional Neural Networks**
Dongyu Liu, Weiwei Cui, Kai Jin, Yuxiao Guo, Huamin Qu
TIST ACM Transactions on Intelligent Systems and Technology, 2018.
- 2016 [J19] **SmartAdP: Visual Analytics of Large-scale Taxi Trajectories for Selecting Billboard Locations**
Dongyu Liu, Di Weng, Yuhong Li, Jie Bao, Yu Zheng, Huamin Qu, Yingcai Wu
TVCG IEEE Transactions on Visualization and Computer Graphics, 2017.
> *Special Issue: Proceedings of IEEE VIS 2016 - VAST Track.*
 [The top 20 most cited work in TVCG since 2017](#)
- [J20] **egoComp: A Node-link Based Technique for Visual Comparison of Ego-network**
Dongyu Liu, Fangzhou Guo, Bowen Deng, Huamin Qu, Yingcai Wu
IV Information Visualization, SAGE, 2016.
- 2015 [J21] **PeakVizor: Visual Analytics of Peaks in Video Clickstreams from Massive Open Online Courses**
Qing Chen, Yuanzhe Chen, **Dongyu Liu**, Huamin Qu, Conglei Shi, Yingcai Wu
TVCG IEEE Transactions on Visualization and Computer Graphics, 2016.
- REFERRED CONFERENCE PROCEEDINGS**
- 2026 [C1] **DELUGE: Towards Continental-Scale Daily Pluvial Flood Damage Prediction via Interpretable Conditioning on Foundation Model Embeddings**
Yuya Kawakami, Daniel Cayan, **Dongyu Liu**, Kwan-Liu Ma, Tom Corringham
SIGSPATIAL ACM International Conference on Advances in Geographic Information Systems, 2026 (in press).
- [C2] **VEIL: How Visual Encoding Hijacking Induces Bias In Vision Models**
Suranjana Sooraj, Xuyang Chen, Madhumitha Venkatesan, **Dongyu Liu**
VIS IEEE VIS 2026 (Short Paper)
- 2025 [C3] **Non-programmers Assessing AI-Generated Code: A Case Study of Business Users Analyzing Data**
Yuvraj Virk, **Dongyu Liu**
VL/HCC IEEE Symposium on Visual Languages and Human-Centric Computing (Short Paper), 2025.
- 2022 [C4] **AER: Auto-Encoder with Regression for Time Series Anomaly Detection**
Lawrence Wong, **Dongyu Liu**, Laure Berti-Equille, Sarah Alnegheimish, Kalyan Veeramachaneni
BigData IEEE International Conference on Big Data, 2022.
- [C5] **Sintel: A Machine Learning Framework to Extract Insights from Signals**
Sarah Alnegheimish, **Dongyu Liu**, Carles Sala, Laure Berti-Equille, Kalyan Veeramachaneni
SIGMOD ACM SIGMOD/PODS International Conference on Management of Data, 2022.
 [Popular open source library \(github stars > 850\)](#)
- 2020 [C6] **TadGAN: Time Series Anomaly Detection Using Generative Adversarial Networks**
Dongyu Liu*, Alexander Geiger*, Sarah Alnegheimish, Alfredo Cuesta-Infante, Kalyan Veeramachaneni
BigData IEEE International Conference on Big Data, 2020.
- [C7] **Cardea: An Open Automated Machine Learning Framework for Electronic Health Records**

Sarah Alnegheimish, Najat Alrashed, Faisal Aleissa, Shahad Althobaiti, **Dongyu Liu**, Mansour Alsaleh, and Kalyan Veeramachaneni

DSAA IEEE International Conference on Data Science and Advanced Analytics, 2020.

- 2018 [C8] **ATMSeer: Increasing Transparency and Controllability in Automated Machine Learning**
Qianwen Wang, Yao Ming, Zhihua Jin, Qiaomu Shen, **Dongyu Liu**, Micah J. Smith, Kalyan Veeramachaneni, Huamin Qu
CHI ACM Conference on Human Factors in Computing Systems, 2019.

- 2016 [C9] **A Guided Tour of Literature Review: Facilitating Academic Paper Reading with Narrative Visualization**
Yun Wang, **Dongyu Liu**, Huamin Qu, Qiong Luo, Xiaojuan Ma
VINCI ACM International Symposium on Visual Information Communication and Interaction, 2016.

PREPRINTS

- 2026 [P1] **ConceptTS: LLM-Guided Concept Bottlenecks for Interpretable Multivariate Time-Series Forecasting**
Yichen Jiang, Yueqiao Chen, **Dongyu Liu**
arXiv arXiv preprint, 2026.
- [P2] **Constraint-Aware Synthetic Tabular Data Generation via Inter-Column Constraint Discovery with LLM Agents**
Jianxing Zhao, Mao Guan, **Dongyu Liu**
arXiv arXiv preprint, 2026.
- [P3] **Plover: Steering GUI Agents through Plan-Centric Interaction**
Madhumitha Venkatesan, Shicheng Wen, Jiajing Guo, Jorge Piazzentin One, Liu Ren, **Dongyu Liu**
arXiv arXiv preprint, 2026.
- [P4] **ShapeTalk: Combining Natural Language and Sketch for Time-Series Pattern Querying**
Guoruizhe Sun, Yueqiao Chen, Emily Guo, Yutong Yao, **Dongyu Liu**
arXiv arXiv preprint, 2026.
- [P5] **VTBench: A Multimodal Framework for Time-Series Classification with Chart-Based Representations**
Madhumitha Venkatesan, Xuyang Chen, **Dongyu Liu**
arXiv arXiv preprint, 2026.
- 2025 [P6] **VIDEE: Visual and Interactive Decomposition, Execution, and Evaluation of Text Analytics with Intelligent Agents**
Sam Yu-Te Lee, Chengyang Ji, Shicheng Wen, Lifu Huang, **Dongyu Liu**, Kwan-Liu Ma
arXiv arXiv preprint, 2025.
- 2024 [P7] **CATP: Context-Aware Trajectory Prediction with Competition Symbiosis**
Jiang Wu, **Dongyu Liu**, Yuchen Lin, Yingcai Wu
arXiv arXiv preprint, 2024.
- 2023 [P8] **Pyreal: A Framework for Interpretable ML Explanations**
Alexandra ZYTEK, Wei-En Wang, **Dongyu Liu**, Laure Berti-Equille, Kalyan Veeramachaneni
arXiv arXiv preprint, 2023.
- 2021 [P9] **AQeyes: Visual Analytics for Anomaly Detection and Examination of Air Quality Data**
Dongyu Liu, Kalyan Veeramachaneni, Alexander Geiger, Victor O.K. Li, Huamin Qu
arXiv arXiv preprint, 2021.

REFERRED WORKSHOP PAPERS, EXTENDED ABSTRACT, AND POSTERS

- 2023 [O1] **Beep: Balancing Effectiveness and Efficiency when Finding Multivariate Patterns in Racket Sports**
Jiang Wu, **Dongyu Liu**, Ziyang Guo, Yingcai Wu
KDD KDD 2023 Workshop on Data Science and AI for Sports (DSAI4Sports).
- 2021 [O2] **Sibyl: Explaining Machine Learning Models for Better Child Welfare Decision Making**
Alexandra ZYTEK, **Dongyu Liu**, Rhema Vaithianathan, and Kalyan Veeramachaneni

CHI ACM Conference on Human Factors in Computing Systems - Extended Abstracts, 2021.

2020 [O3] **Understanding User-Bot Interactions for Small-Scale Automation in Open-Source Development**

Dongyu Liu*, Micah J. Smith*, and Kalyan Veeramachaneni

CHI ACM Conference on Human Factors in Computing Systems - Extended Abstracts, 2020.

2015 [O4] **egoComp: A Node-link Based Technique for Visual Comparison of Ego-network**

Dongyu Liu, Fangzhou Guo, Bowen Deng, Huamin Qu, Yingcai Wu

VIS IEEE Visualization Conference - Exploring Graphs at Scale Workshop, 2015.

[O5] **ParkVis: Visual Analytic System for Population Movement in DinoFun World**

Abishek Puri, **Dongyu Liu**, Shaoyu Chen, Siwei Fu, Tianyu Wang, Yeukyin Chan, Huamin Qu

VIS IEEE Visualization Conference - VAST Challenge, 2015

2013 [O6] **InSide: Interactive Sketching for Image Database Exploration**

Hongxin Zhang, **Dongyu Liu**, Changhan Wang

CAD/Graphics IEEE International Conference on Computer-Aided Design and Computer Graphics, 2013.

PATENTS

2026 **System and Method for Plan-Centric Supervision and Repair of Vision-Based Graphical User Interface Automation Agents**

Jiajing Guo, Jorge Henrique Piazzentin Ono, Madhumitha Venkatesan, Shicheng Wen, **Dongyu Liu**, Wenbin He, Liu Ren

U.S. Patent Application 19/742,934, filed on July 15, 2026.

2024 **Interpretable Visualization System for Graph Neural Network**

Dakuo Wang, Sijia Liu, Abel Valente, Chuang Gan, Bei Chen, **Dongyu Liu**, Yi Sun

U.S. Patent [12,182,698](#), issued on December 31, 2024.

2020 **System and Method for Large Scale Multidimensional Spatio-Temporal Data Analysis**

Panpan Xu, Liu Ren, **Dongyu Liu**

U.S. Patent [10846321](#), issued on November 24, 2020.

INVITED TALKS

Agentic Interfaces for Advanced Data Analytics

Aug 2026 Bosch Research and Technology Center, Sunnyvale, CA, USA

Multimodal and Plan-Centric Interaction for Generative Visual Analytics

Jul 2026 ChinaVIS 2026 International Forum, Guiyang, China (Virtual)

Making Sense of Air Pollution Data to Inform Decisions in Underserved Communities

Jul 2024 ChinaVis 2024, Hong Kong, Panel of Visualization Aids Sustainable Development (Invited Talk and Panelist)

Charting the Unseen: Visualization as the Pathway to Effective Human-AI Teaming

Nov 2024 UC Davis, GGCS Fall Research Salon, Alumni Center

Jul 2024 Zhejiang University, Summer School of Visual Analytics, Hangzhou, China

Apr 2024 UC Berkeley, 15th annual California Cognitive Science Conference (CCSC)

Signal Intelligence: Human-AI Teaming for Time Series Analytics

Oct 2023 UC Davis, MADDD Seminars (Mathematics of Data and Decisions at Davis)

Oct 2023 UC Davis, Seminars in the Center for Spaceflight Research

Jul 2023 ChinaVis, Special Topic on VIS + AI

Make the Invisible Visible: Human-AI Teaming in Healthcare Data Analytics

- Oct 2023 UC Davis, ECS289H - Special Topics in Human-AI Interactions
- Jul 2023 UC Davis, Interventional Biophotonics Week Symposium and Summer School
- Human-AI Teaming for Decision-Making: Augmenting Human Intellect with Visualization and Human-Centered AI** 
- Jul 2023 Zhejiang University, Summer School
- Mar 2023 UC Davis
- Mar 2023 ETH Zürich
- Mar 2023 Florida State University
- Mar 2023 Purdue University
- Jan 2023 Hong Kong University of Science and Technology
- Dec 2022 Peking University
- Sintel: An Overarching Ecosystem for End-to-End Time Series Anomaly Detection**
- Jan 2022 Shangdong University, Interactive Data Exploration System (IDEAS) lab
- Nov 2021 Hong Kong University of Science and Technology, VisLab
- Jul 2021 Zhejiang University, Summer School
- Jan 2021 Schlumberger
- Combining Automated Analysis with Interactive Vis for Spatio-temporal Data Analysis** 
- Oct 2019 MIT, Data to AI Group
- Aug 2018 Hong Kong University of Science and Technology, PhD Thesis Defense
- May 2019 Hong Kong University of Science and Technology, RPG Student Forum & Tea Gathering
- What Visualization Can Do for Explainable AIs**
- Nov 2017 Bosch Research, AI Workshop
- Things You Need to Know about Ph.D. Study**
- May 2017 Zhejiang University 120th Anniversary
- Use Big Urban Data for Citywide Optimal Location Selection**
- Apr 2016 Zhejiang University, Workshop on Urban Computing
- Learn to be a Good Full-Stack Developer as a Visualization Researcher**
- Jan 2016 Zhejiang University, State Key Lab of CAD&CG
- Visual Analytics for Student Online Learning Behavior Analysis**
- Nov 2015 Microsoft Research Asia Symposium on Collaborative Research
- Nov 2015 Workshop of WeChat-HKUST Joint Lab on AI Technology (WHAT LAB)

TEACHING

2025—	ECS273 - Visual Analytics [S25, S26] Instructor.	UC Davis
2024—	ECS163 - Information Visualization [W24, S25, S26] Instructor.	UC Davis
2024	ECS289G - Human-AI Teaming [S24] Instructor.	UC Davis
2023	ECS272 - Information Visualization [F23] Guest Instructor with Prof. Kwan-Liu Ma.	UC Davis

Completed 8 training workshops and 2 teaching demos as a trainee ([Certificate](#)).

ADVISING AND MENTORING

ADVISEES

- PhD Jianxing Zhao (CS; Sep 2025 — Present)
 Madhumitha Venkatesan (CS; Sep 2025 — Present)
 Yueqiao Chen (CS; Sep 2024 — Present)
 Yu-Chia Huang (CS; Co-advised with Kwan-Liu Ma; Sep 2023 — Present)
- Master's Zihang Fu (CS; Sep 2026 — Present)
 Yan Liang (CS; Jun 2026 — Present)
 Gunwoo Kim (CS'26; MS Project; Sep 2025 — Jun 2026)
 Guoruizhe Sun (CS'26; MS Project; Jul 2025 — Jun 2026)
 Himanshu Nimonkar (CS; Mar 2025 - July 2025)
 Emily Guo (CS'25; MS Thesis; Now at PG&E; Mar 2024 - Jun 2025)
- UG Sabrina Cheung (Data Sci.; Jun 2026 — Present)
 Linh Huynh (CS; Summer 2026)
 Suranjana Sooraj (Data Sci.; Now at HPE; Sep 2025 — Apr 2026)
 Xuyang Chen (Applied Physics; CS minor; Feb 2025 — Apr 2026)
 Yuvraj Virk (CS; Now PhD at UIUC; Jul 2024 — Jan 2025)
 Boquan Fang (CS'24; Now at Amazon AWS; Mar 2024 — Jun 2024)
 Yinkun Tang (CS'24; Now PhD at UIUC; Mar 2024 — Jun 2024)
- Visiting Jingdi Wu (MS from Rutgers University; Summer 2026)
 Ruqi Sun (UG from SUSTech; Summer 2026)
 Yichen Jiang (EE MS from Stanford University; Sep 2025 — Aug 2026)
 Yuhan Huang (AI UG from Wuhan University; Now MS at UCLA; Summer 2026)
 Ke Yao (CS UG from Wuhan University; Now MS at CMU; Summer 2026)
 Patrick Yao (CS UG from Hong Kong Univ; Now MS at CMU; May 2025 — Jul 2025)
 Juntong Chen (CS MS from East China Normal Univ; Now at Nvidia; Sep 2024 - Mar 2025)
 Jiang Wu (CS PhD from Zhejiang Univ; Now at HiThink; Oct 2023 - Apr 2024)
- Thesis Raiyan Jahangir (PhD Thesis; In progress)
- Committee Yuya Kawakami (PhD Thesis; In progress)
 Yun-Hsin Kuo (PhD Thesis; In progress)
 Sam Yu-Te Lee (PhD Thesis; In progress)
 Hsiao-Ying Lu (PhD Thesis; Jun 2026)
 Junchao Chen (PhD Thesis; Jun 2026)
 Mak Ahmad (PhD Thesis; Dec 2025)
 Jeremy Wang (MS Thesis; Dec 2025)
 Ariel Kamen (MS Thesis; Jun 2025)
 Jingchao Fang (PhD Thesis; Jun 2024)
- Capstone Catherine Kang, Jacob Vogt, Hangyul Yun, Mihika Krishna (CS'24; BirdMig; 2024)
 (ECS 193) Jose Gavidia, Billy Ouattara, Seungeui Song, Roger Cheng (CS'24; GenCartoon; 2024)

MENTEES PRIOR TO UC DAVIS

PhD Rui Sheng (HKUST CSE)

Alexandera Zytok (MIT EECS'24; Now Postdoc Fellow at Sierra AI)

Sara Pidò (PoliMi DADS'23; Now Postdoc at MIT)

Furui Cheng (HKUST CSE'22; Now Postdoc at ETH Zürich)

Master's Sarah Alnegheimish (MIT EECS'22; Now PhD at MIT)
Romain Palazzo (EPFL CS/MATH'22; Now at DataCebo)
Lawrence Wong (MIT EECS'22; Now at Amazon)
Nassim Oufattole (MIT EECS'22; Now PhD at MIT)
Alexander Geiger (TUM IS'20; Now at MontBlancAI)

UG Rui Yao (MIT EECS'22; Now Master's at MIT)
Saarang Bondalapati (High School Intern; Now UG at Cornell)

SERVICE AND OUTREACH

CONFERENCE ORGANIZATION COMMITTEE

2027 IEEE PacificVis (Co-Chair, VisNotes (Short Papers) Track)

2026 IEEE PacificVis (Co-Chair, Posters Track)

2024 IEEE PacificVis (Co-Chair, Posters Track)

PC MEMBER

2026 IEEE VIS (Short Papers), ChinaVis

2025 IEEE VIS, ChinaVis, VisMeetsAI Workshop at IEEE PacificVis

2024 IEEE VIS

2023 IEEE VIS, ChinaVis, IEEE DSAA

2022 IEEE VIS (Short Papers), ChinaVis, IEEE DSAA

2021 IEEE VIS (Short Papers)

2020 IEEE VIS (Short Papers)

EDITORIAL BOARDS

2023—26 **Associate Editor**, Young Advisory Board, Journal of Visual Informatics

PAPER REVIEWING

Conf. IEEE VIS, IEEE PacificVis, EuroVis, ChinaVis,
ACM CHI, ACM CSCW, ACM IUI, ACM UIST, IEEE DSAA, ACL Rolling Review

Journal IEEE TVCG, IEEE CG&A, Comput. Graph. Forum, ACM TiS, IJHCI,
TMLR, VLDB Journal, JVL, C,
IEEE TBD, IEEE TKDE, IEEE TNSE, IEEE Access

GRANT REVIEW PANELS

2025 **Evaluation Committee**, NSERC—CSE Research Communities.

2024 **Panelist**, NSF Proposal Review Panel.

2020 **Program Committee**, C3.ai Digital Transformation Institute Research Award
The awards are created to address Mitigation of COVID-19 and Future Pandemics.

UNIVERSITY SERVICE

- 2024—26 **Member**, GGCS Admissions Committee, UC Davis.
- 2024 **Panelist**, AI in Interventional Biophotonics, Interventional Biophotonics Week Symposium and Summer School, UC Davis.
- 2024 **Member**, Recruitment Advisory Committee, UC Davis.
- 2022 **Mentor**, SES Graduate Application Assistance Program, MIT IDSS
Assisted students from underrepresented groups in preparing PhD applications.
- 2021 **Peer Reviewer**, Mock Faculty Job Talk, MIT LIDS

MEDIA COVERAGE

- Apr 2026 **New Visual Analysis Tool Calms the Climate Data Storm**
[UC Davis COE News](#), by Jessica Heath
- Jul 2025 **Point-of-Care Cardiovascular Assessment for Earlier Detection of Preeclampsia and Heart Failure in At-Risk Pregnant Patients**
[CITRIS and the Banatao Institute](#), by Anna Linn
- Feb 2025 **Visualizing and Communicating Ambiguity for High-Stakes Collaboration**
[UC Davis COE News](#), by Jessica Heath
- Aug 2023 **Cultivating Collaboration: Dr. Dongyu Liu Connects People to AI and with Each Other**
[UC Davis COE News](#), by Jessica Heath
- Jun 2022 **Building Explainability into the Components of Machine Learning Models**
[MIT News](#), by Adam Zewe (reproduced by [ScienceDaily](#) and [Dataconomy](#))
- Oct 2021 **Making Machine Learning More Useful to High-Stakes Decision Makers**
[MIT News](#), by Adam Zewe (featured on the front page)
- Apr 2021 **One-Stop Machine Learning Platform Turns Health Care Data Into Insights**
[MIT News](#), by MIT LIDS (reproduced by [Health IT Analytics](#))
- Dec 2020 **Method Finds Hidden Warning Signals in Measurements Collected Over Time**
[MIT News](#), by Daniel Ackerman (reproduced by [Datanami](#))
- May 2019 **Cracking Open the Black Box of Automated Machine Learning**
[MIT News](#), by Rob Matheson (reproduced by [InfoQ](#))
- Jun 2017 **From Taxi Trajectories to Outdoor Billboard Location Selection (Chinese)**
[Top AI News](#), by Microsoft Research Asia