Arpit Narechania

Rm 3552 (via Lifts 25-26 or 27-28), Department of Computer Science and Engineering, HKUST, Clear Water Bay, Hong Kong SAR
arpit@ust.hk | narechania.com | datavisards.com | /in/narechania | (Google Scholar) k1S8Sc4AAAAJ
(Github) arpitnarechania | arpitnarechania

Education

Georgia Institute of Technology (Georgia Tech) — Atlanta, USA
Ph.D. in Computer Science. ***Advisor****: Alex Endert.* ***GPA****: 3.70/4*
Thesis*: Designing, Developing, and Democratizing Guidance for Visual Analytics*
Thesis Committee*: Alex Endert, John Stasko, Duen Horng 'Polo' Chau, Clio Andris, Shamkant B. Navathe, Mennatallah El-Assady*
IEEE VGTC Visualization Dissertation Award — *2018 – 24*
Foley Scholar Finalist
Outstanding Teaching Assistant of the Year
Graduate Teaching Fellow

Indian Institute of Science (IISc) — Bengaluru, India
Non-degree, Proficiency Certificates in Data Mining, Data Analytics — *2017*

RWTH Aachen University — Aachen, Germany
Non-degree, Study Abroad Program, Mechanical Engineering. ***GPA****: 9.16/10 (scaled)* — *2014*

Indian Institute of Technology (IIT) Mandi — Mandi, India
B.Tech in Mechanical Engineering, ***Minor****: Device Materials.* ***CGPA****: 8.23/10*
Young Achiever Alumnus Award for Professional Excellence — *2011 – 15*
Valedictorian (Graduation Dinner)

Employment

The Hong Kong University of Science and Technology (HKUST) — Jan. 2025 – onwards
Assistant Professor (tenure-track) — Computer Science and Engineering Department — *Hong Kong SAR, China*

- I direct the DataVisards Research Lab wherein I conduct grant-funded research and student-advising.
- I also perform teaching, service, and other duties that faculty (generally) perform.

Georgia Institute of Technology (Georgia Tech) — Aug. 2018 – Dec. 2024
*Graduate Research and Teaching Assistant (****Mentors****: Alex Endert, Ahsan Qamar)* — *Atlanta, USA*

- GRA: Develop visual analytics tools that assist automotive systems engineers to make better sense of automotive datasets. Part of this work is currently deployed into Ford's production environment and is used by systems engineers.
- GTA: CS 4460 (x2), CS 7451

Adobe Research — Aug. – Dec. 2023
*Part-time Research Intern (****Mentors****: Jane Hoffswell, Shunan Guo)* — *Atlanta, USA (Remote)*

- Continuing our work on dynamic, co-adaptive guidance in visual data analysis.

Adobe Research — May – Aug. 2023
*Research Intern (****Mentors****: Jane Hoffswell, Shunan Guo)* — *San Jose, USA*

- Working on dynamic, co-adaptive guidance in visual data analysis.

Adobe Research — May – Aug. 2022
*Research Intern (****Mentors****: Atanu Sinha, Fan Du, Alexa Siu, Nedim Lipka)* — *Atlanta, USA [Remote]*

- Developed a (patented) technique to extract information from PDFs for Analytics!

Adobe Research — May – Aug. 2021
*Research Intern (****Mentors****: Fan Du, Atanu Sinha)* — *Atlanta, USA [Remote]*

- Developed novel (patented) techniques to accelerate knowledge discovery from data lakes during data preparation.
- Part of this work is currently deployed into an Adobe product and was also presented at an annual Adobe Sneaks event.

Microsoft Research — May – Aug. 2020
*Research Intern (****Mentors****: Adam Fourney, Gonzalo Ramos, Bongshin Lee)* — *Atlanta, USA [Remote]*

- Developed a novel (patented) technique to help users inspect for, isolate, and fix errors in Human-AI conversations.

Mu Sigma 2019
*Part-time Design Consultant (**Mentor**: Zubin Dowlaty)* *Bengaluru, India [Remote]*
- Consulted on UI-UX matters of their web-based interactive trading platform.

Lumovia (Startup, 🏆 Verizon 5G EdTech Challenge 2019 Winners, $100k) 2018 – 19
*Co-founder, All things Tech (**Mentor**: Richard Henneman)* *Atlanta, USA*
- Developed an app for students (and teachers) to learn (and teach) Physics using Augmented Reality (AR) and 5G.
- Technologies used: *ARCore, Wikitude, Unity, Python, AngularJS, SocketIO, Flask*

Rave Analytics LLC (Startup, now acquired) Apr. 2017 – Aug. 2018
*Part-time Founding Full Stack Engineer (**Mentors**: Zubin Dowlaty, Subir Mansukhani)* *Bengaluru, India*
- Developed the frontend for this advanced trading platform for the U.S. stock market.

Intuition.AI (Startup, now acquired by Domino Data Lab) Jul. 2018
*Software Engineer (**Mentor**: Madhavan Thirumalai)* *Bengaluru, India*
- Consulted a U.S. based cryptocurrency client in setting up their data engineering pipelines on AWS.
- Designed and developed this AI consultation startup's website.

Khosla Labs (Startup incubator, now Veri5Digital) Jul. 2015 – Jun. 2018
*Full Stack Data Scientist (**Mentors**: Subir Mansukhani, Srikanth Nadhamuni)* *Bengaluru, India*
- **Workbench.AI**: Worked on a machine learning workbench aimed to foster citizen data scientists.
- **LoansApp**: Worked on a lending platform that gives credit using alternative data sources.
- **Tracker.AI**: Built a real-time AI-powered sales force tracking and beat management system.
- **Expense Tracker**: Built a real-time NLP-based expense tracker by parsing text from SMSes.
- **DataJuno**: Built an analytics platform to crunch and visualize real-time data streams from users users.

Telecom Regulatory Authority of India (TRAI), Govt. of India Jul. 2017 – Jan. 2018
*Volunteer Software Engineer (**Mentor**: Subir Mansukhani)* *Bengaluru, India*
- Developed a spam classifier module for TRAI's Android app that flags messages (SMS) from fraudulent telemarketers.

eGovernments Foundation & State Govt. of Andhra Pradesh, Govt. of India 2015 – 16
*Volunteer Software Engineer (**Mentors**: Manu Srivastava, Krishnakumar Thiagarajan)* *Hyderabad, India*
- Developed a monitoring dashboard for 120 Urban Local Bodies (ULBs) for better digital governance
- 🏆 Shri Chandrababu Naidu, then state chief minister personally appreciated and awarded this work a state best 3-star rating.

Mercedes Benz Research and Development India Dec. 2013 – Feb. 2014
*Student Intern (**Mentors**: Praveen Bhat, Partha Bhattacharya)* *Bengaluru, India*
- Developed the maps and navigation module into Smart Drive 3, the Android app for Daimler's SMART car.

GEMTECH Dec. 2012 – Feb. 2013
*Student Intern (**Mentor**: Hiren Bavishi)* *Navi Mumbai, India*
- Performed CNC Programming of Sheet Metal fabrication machines (Press Brakes, Punching machines) for Elevator Cars.

Genius Electronics Jun. – Aug. 2011
*Student Intern (**Mentor**: Ajay Narechania)* *Thane, India*
- Worked on Micro-controller-powered Consumer Electronics Products such as temperature controllers, pH-meters.

$ Research Grants, Gifts, and other Funding

Adobe Research | Gift 2026 –
Alibaba | Grant as PI with Dr. Xiaojuan Ma 2026 –
Adaptive Machines | Gift 2026 –
Huawei Technologies | Donation 2025 –

As a faculty member, my research is also supported by a **startup grant** from The Hong Kong University of Science and Technology. As a student at Georgia Tech, my research was supported by a **Graduate Teaching Fellowship** from the Center for Teaching and Learning at Georgia Tech, **internship stipends** from **Adobe Research (x3)** and **Microsoft Research (x1)**, and grants, gifts, and awards from **Ford Motor Company**, **National Science Foundation (USA)**, **Adobe Research**, and **Georgia Tech**. In particular, I received **a startup grant worth $100k** from **Verizon Wireless** (shared across four members), **a company-wide hackathon award** from Adobe, **three poster awards**, and **one travel grant**.

Journal Publications (* equal contribution; † as advisor)

13. Nguyen-Truong Thinh*, Yuxuan Du*, Phongsakon Mark Konrad, and **Arpit Narechania**†. Fact-check Your Information (FYI): A Design Probe to Understand How People Actually Fact-check Data-Driven Articles. *IEEE TVCG*, 2027

12. Shuvam Swapnil Dash and **Arpit Narechania**†. PoseForge: Editable Pose Analytics for AI-Assisted Sports Coaching. *IEEE Transactions on Visualization and Computer Graphics (TVCG)*, 2027

11. Arpit Narechania. Guidance for Visual Analytics: Toward a Contract for Human–AI Collaboration. *IEEE Computer Graphics and Applications*, 2026. URL https://doi.org/10.1109/MCG.2026.3728744

10. Arpit Narechania, Alex Endert, and Clio Andris. Cartographers in Cubicles: How Training and Preferences of Mapmakers Interplay with Structures and Norms in Not-for-Profit Organizations. *Proceedings of the ACM on Human-Computer Interaction*, 9 (7):1–24, 2025. URL https://doi.org/10.1145/3757461

9. Arpit Narechania, Alex Endert, and Clio Andris. Exploropleth: Exploratory Analysis of Data Binning Methods in Choropleth Maps. *Cartography and Geographic Information Science*, 2025. URL https://doi.org/10.1080/15230406.2025.2543483
Website (open source): exploropleth.github.io
Book chapter: In the 5th Edition of Thematic Cartography and Geovisualization.

8. Arpit Narechania, Shunan Guo, Eunyee Koh, Alex Endert, and Jane Hoffswell. Utilizing Provenance as an Attribute for Visual Data Analysis: A Design Probe with ProvenanceLens. *IEEE TVCG*, 2025. URL https://doi.org/10.1109/TVCG.2025.3571708

7. Arpit Narechania, Kaustubh Odak, Mennatallah El-Assady, and Alex Endert. ProvenanceWidgets: A Library of UI Control Elements to Track and Dynamically Overlay Analytic Provenance. *IEEE TVCG*, 2025. URL https://doi.org/10.1109/TVCG.2024.3456144
Website (open source): ProvenanceWidgets.github.io

6. Arpit Narechania, Adam Coscia, Emily Wall, and Alex Endert. Lumos: Increasing Awareness of Analytic Behavior during Visual Data Analysis. *IEEE TVCG*, 2022. URL https://doi.org/10.1109/TVCG.2021.3114827
Website (open source): lumos-vis.github.io

5. Emily Wall*, **Arpit Narechania***, Adam Coscia, Jamal Paden, and Alex Endert. Left, Right, and Gender: Exploring Interaction Traces to Mitigate Human Biases. *IEEE TVCG*, 2022. URL https://doi.org/10.1109/TVCG.2021.3114862

4. Arpit Narechania, Alireza Karduni, Ryan Wesslen, and Emily Wall. VitaLITy: Promoting Serendipitous Discovery of Academic Literature with Transformers & Visual Analytics. *IEEE TVCG*, 2022. URL https://doi.org/10.1109/TVCG.2021.3114820
Website (open source): vitality-vis.github.io

3. Arpit Narechania*, Arjun Srinivasan*, and John Stasko. NL4DV: A Toolkit for Generating Analytic Specifications for Data Visualization from Natural Language Queries. *IEEE TVCG*, 2021. URL https://doi/org/10.1109/TVCG.2020.3030378
Website (open source): nl4dv.github.io/nl4dv

2. Arpit Narechania, Ahsan Qamar, and Alex Endert. SafetyLens: Visual Data Analysis of Functional Safety of Vehicles. *IEEE TVCG*, 2021. URL https://doi.org/10.1109/TVCG.2020.3030382
Demo: ocular.cc.gatech.edu/safetylens/src

1. Rahul C Basole, Ahsan Qamar, Biswajyoti Pal, Michael Corral, Matthew Meinhart, and **Arpit Narechania**. Understanding Failure Mode Effect Analysis Data Using Interactive Visual Analytics. *IEEE Computer Graphics and Applications*, 2019. URL https://10.1109/MCG.2019.2944230
Demo: ocular.cc.gatech.edu/datahawk

Conference Proceedings (* equal contribution; † as advisor)

10. Yanwei Huang and **Arpit Narechania**†. WebSeek: Facilitating Proactive and Reactive Guidance for Decision Making on the Web. *ACM CHI*, 2026. URL https://doi.org/10.1145/3772318.3791945

9. Yanwei Huang, Wesley Deng, Sijia Xiao, Motahhare Esla, Jason Hong, **Arpit Narechania**†, and Adam Perer. Vipera: Blending Visual and LLM-Driven Guidance for Systematic Auditing of Text-to-Image Generative AI. *ACM CHI*, 2026

8. Shiyao Li, Roshini Deva, **Arpit Narechania**, Alireza Karduni, Cindy Xiong, and Emily Wall. Does a Picture Paint a Thousand Words? Using Visual and Textual Channels to Understand Attitudes and Beliefs. *ACM CHI*, 2026

7. Arpit Narechania, Alex Endert, and Atanu Sinha. Guidance Source Matters: How Guidance from AI, Expert, or a Group of Analysts Impacts Visual Data Preparation and Analysis. *ACM IUI*, 2025. URL https://doi.org/10.1145/3708359.3712166

6. Arpit Narechania, Alex Endert, and Clio Andris. Resiliency: A Consensus Data Binning Method. *12th International Conference on Geographic Information Science (GIScience)*, 2023. URL https://doi.org/10.4230/LIPIcs.GIScience.2023.55
Website (open source): github.com/arpitnarechania/binguru

5. Arpit Narechania, Surya Chakraborty, Shivam Agarwal, Atanu R Sinha, Ryan A. Rossi, Fan Du, Jane Hoffswell, Shunan Guo, Eunyee Koh, Alex Endert, and Shamkant Navathe. DataCockpit: A Toolkit for Data Lake Navigation and Monitoring Utilizing Quality and Usage Information. In *2023 IEEE International Conference on Big Data (BigData)*, 2023. URL https://doi.org/10.1109/BigData59044.2023.10386133

4. Arpit Narechania, Fan Du, Atanu R Sinha, Ryan Rossi, Jane Hoffswell, Shunan Guo, Eunyee Koh, Shamkant B. Navathe, and Alex Endert. DataPilot: Utilizing Quality and Usage Information for Subset Selection during Visual Data Preparation. *ACM CHI*, 2023. URL https://doi.org/10.1145/3544548.3581509

3. Rishab Mitra*, **Arpit Narechania***, Alex Endert, and John Stasko. Facilitating Conversational Interaction in Natural Language Interfaces for Visualization. *IEEE VIS (Short Papers)*, 2022. URL https://doi.org/10.1109/VIS54862.2022.00010
Website (open source): nl4dv.github.io

2. Arpit Narechania, Adam Fourney, Bongshin Lee, and Gonzalo Ramos. DIY: Assessing the Correctness of Natural Language to SQL Systems. *ACM IUI*, 2021. URL https://doi.org/10.1145/3397481.3450667

1. Prashanth Dintyala*, **Arpit Narechania***, and Joy Arulraj. SQLCheck: Automated Detection and Diagnosis of SQL Anti-Patterns. *ACM SIGMOD International Conference on Management of Data*, 2020. URL https://doi.org/10.1145/3318464.3389754
Website: db-apps.cc.gatech.edu/sqlcheck

Extended Abstract, Poster, Workshop, Demo, Dataset Publications (* equal contribution; † as advisor)

9. Antariksh Verma, Kautubh Odak, and **Arpit Narechania**†. SuperProvenanceWidgets: Tracking and Visualizing Analytic Provenance Across UI Control Elements. *Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*, 2026. URL https://doi.org/10.1145/3772363.3798409
Website (open source): ProvenanceWidgets.github.io

8. Haichang Li, Anjun Zhu, and **Arpit Narechania**†. Alignment–Process–Outcome: Rethinking How AIs and Humans Collaborate. *Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*, 2026. URL https://doi.org/10.1145/3772363.3799032

7. Jianheng Ouyang and **Arpit Narechania**†. Analyzing the Presentation, Content, and Utilization of References in LLM-powered Conversational AI Systems. *Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*, 2026. URL https://doi.org/10.1145/3772363.3798415

6. Tenghao Ji and **Arpit Narechania**†. NL4DV-Stylist: Styling Data Visualizations Using Natural Language and Example Charts. *IEEE VIS 2025 Poster*, 2025. URL osf.io/fs4en_v1
Website (open source): nl4dv.github.io

5. Subham Sah*, Rishab Mitra*, **Arpit Narechania***, Alex Endert, John Stasko, and Wenwen Dou. Generating Analytic Specifications for Data Visualization from Natural Language Queries using Large Language Models. *NLVIZ Workshop at IEEE VIS*, 2024. URL https://arxiv.org/abs/2408.13391
Website (open source): nl4dv.github.io

4. Hongye An, **Arpit Narechania**, Emily Wall, and Kai Xu. vitaLITy 2: Reviewing Academic Literature Using Large Language Models. *NLVIZ Workshop at IEEE VIS*, 2024. URL https://arxiv.org/abs/2408.13450
Website (open source): vitality-vis.github.io

3. Jamal Paden*, **Arpit Narechania***, and Alex Endert. BiasBuzz: Combining Visual Guidance with Haptic Feedback to Increase Awareness of Analytic Behavior during Visual Data Analysis. *Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*, 2024. URL https://doi.org/10.1145/3613905.3651064

2. Arthita Ghosh*, Deven Bansod*, **Arpit Narechania**, Prashanth Dintyala, Su Timurturkan, and Joy Arulraj. Interactive Demonstration of SQLCheck. In *Proceedings of PVLDB*, 2021. URL https://doi.org/10.14778/3476311.3476343
Website: db-apps.cc.gatech.edu/sqlcheck
VS Code Extension: marketplace.visualstudio.com/items?itemName=georgiatechdb.sqlcheck

1. **Arpit Narechania**, Alireza Karduni, Ryan Wesslen, and Emily Wall. VitaLITy: A Dataset of Academic Articles. In *figshare*. figshare, 2021. URL https://figshare.com/articles/dataset/VitaLITy_A_Dataset_of_Academic_Articles/14329151

Preprints (* equal contribution; † as advisor)

2. Tobias Stähle, Matthijs Jansen op de Haar, Sophia Boyer, Rita Sevastjanova, **Arpit Narechania**, and Mennatallah El-Assady. A Design Space for Intelligent Agents in Mixed-Initiative Visual Analytics, 2025. URL https://arxiv.org/abs/2512.23372

1. **Arpit Narechania**, Alex Endert, and Atanu R Sinha. Agentic Enterprise: AI-Centric User to User-Centric AI, 2025. URL https://arxiv.org/abs/2506.22893

Patents

7. Adaptive Dynamic Guidance in Data Analysis Tools — Filed in 2024
Inventors: ***Arpit Narechania****, Jane Hoffswell, Shunan Guo, Eunyee Koh, Prithvi Bhutani* — *Adobe Research, USA*

6. Data Extraction and Analysis From Unstructured Documents — Filed in 2023
Inventors: ***Arpit Narechania****, Fan Du, Atanu R Sinha, Nedim Lipka, Alexa F. Siu, Jane Hoffswell, Eunyee Koh, Vasanthi Holtcamp* — *Adobe Research, USA*

5. Data Identification and Extraction from Unstructured Documents — Filed in 2023, Granted
Inventors: ***Arpit Narechania****, Fan Du, Atanu R Sinha, Nedim Lipka, Alexa F. Siu, Jane Hoffswell, Eunyee Koh, Vasanthi Holtcamp* — *Adobe Research, USA*
US Patent 12,699,851

4. Dashboard for Monitoring Current and Historical Consumption and Quality Metrics of a Dataset — Filed in 2022
Inventors: ***Arpit Narechania****, Fan Du, Atanu R Sinha, Ryan Rossi, Jane Hoffswell, Shunan Guo, Eunyee Koh, John Anderson, Sonali Surange-Dev, Saurabh Mahapatra, Vasanthi Holtcamp* — *Adobe Research, USA*

3. Data Selection based on Consumption and Quality Metrics of a Dataset — Filed in 2022
Inventors: ***Arpit Narechania****, Fan Du, Atanu R Sinha, Ryan Rossi, Jane Hoffswell, Shunan Guo, Eunyee Koh, John Anderson, Sonali Surange-Dev, Saurabh Mahapatra, Vasanthi Holtcamp* — *Adobe Research, USA*

2. Interactive Tree Representing Attribute Quality or Consumption Metrics for Data Ingestion — Filed in 2022, Granted
Inventors: ***Arpit Narechania****, Fan Du, Atanu R Sinha, Ryan Rossi, Jane Hoffswell, Shunan Guo, Eunyee Koh, John Anderson, Sonali Surange-Dev, Saurabh Mahapatra, Vasanthi Holtcamp* — *Adobe Research, USA*
US Patent 12,340,333

1. Natural Language Query Processing and Debugging — Filed in 2021, Granted
Inventors: *Gonzalo Ramos, Adam Fourney, Bongshin Lee,* ***Arpit Narechania*** — *Microsoft Research, Redmond, WA*
US Patent 12,008,043

Notable Awards, Fellowships, and Achievements

Best FYP (Final Year Project) Award – as Supervisor (out of 129 projects) | *HKUST CSE* 2025-2026
IEEE VGTC Visualization Dissertation Award | *IEEE* 2025
Thank a Teacher Note (from a student of CS 4460) | *Center for Teaching and Learning (CTL), Georgia Tech* 2023-24
Foley Scholar Finalist (1st in Computer Science), Highest Honor for Ph.D. Students | *IPaT, Georgia Institute of Technology.* 2023
Overall Winner, Code Quality Jam (Hackathon) | *Adobe Inc.* 2023
Graduate Teaching Fellowship | *Center for Teaching and Learning (CTL), Georgia Tech* 2023-24
Tech to Teaching Fellow | *Center for Teaching and Learning (CTL), Georgia Tech* 2023
CIRTL Associate | *Center for the Integration of Research, Teaching and Learning Network* 2023
International Conference Travel Award, GVU Center | *Georgia Tech.* 2023
Best Poster Award, Executive Vice President for Research at CRIDC Poster Competition | *Georgia Tech.* 2023
CTL Outstanding Graduate Teaching Assistant of the Year | *School of Interactive Computing, Georgia Tech.* 2022
Best Poster Award, College of Computing at CRIDC Poster Competition | *Georgia Tech.* 2022
Tableau Desktop Specialist Certification (Score: 972/1000) | *Tableau.* 2022
Best Poster Award, Executive Vice President for Research at CRIDC Poster Competition | *Georgia Tech.* 2021
Young Achiever Award for Professional Excellence | *1st ever alumni recipient, IIT Mandi, India.* 2020
Citizen Police Academy Graduate | *Georgia Tech Police Department, Atlanta, USA.* 2019
Winner, Verizon 5G EdTech Challenge (Startup Grant of $100k) | *Verizon Wireless, New York, USA.* 2018
Excellence Award from Chief Minister (Shri Chandrababu Naidu) | *Government of Andhra Pradesh, India.* 2016
Winner, Google Apptitude - Android App Challenge | *Google Developer Group, India* 2015
National Finalist (Top 20), Jed-i Project Challenge | *Bengaluru, India.* 2015
All India Rank 2 | *Aakash Android App Development Challenge, IIT Guwahati, India.* 2013
Among Top 1% in India | *IIT-JEE and AIEEE engineering entrance exams, India.* 2011
Merit Scholarship, Full Tuition Waiver | *Department of Electronics, Sathaye Junior College, India.* 2011
Chatrabhuj Narsee Award (All India Top 5) | *Secured 97.29% in Class 10, C.N.M. School, India.* 2011

Ph.D. Students

Zhiteng Cao Fall 2026 –
Xiaoyu Wang Fall 2026 –
Jieliang Yin | *co-supervised with Dr. Hongbo Fu at HKUST* Summer 2026 –
Fengjie Wang Fall 2025 –
Yanwei Huang Fall 2025 –

M.Phil. Students

Jianheng Ouyang Fall 2026 –
Thinh Nguyen Truong Fall 2026 –
Eman Ansar Fall 2025 –

MSc.

Mridul Kumar Sharma Spring 2026

COMP 4981: Final Year Thesis

Abdelrahman Awadalla 2026 – 2027

COMP 4981: Final Year Project

Hui Ka Tai, Kong Kwok Hin, Zheng Ka Cheong, Wong Ka Hei	2026 – 2027
Pranavi Kuntrapakam, Kavya Pareek, Anas Boutor	2026 – 2027
Zhang Xingjian, Cheung Alan Pak To	2026 – 2027
Tang Ho Yeung, Leong Hok Weng, Su Ziwen	2026 – 2027
Yeung Miu Wan, Oh Yeontaek, Chung Ho Man, Lee Eunseo | *co-supervised with Dr. Lionel Parreaux*	2026 – 2027
Jerzy Jan Janeczek, Seokhyeon Hong, Angus Han Jern Loh, Arnav Kithania	2025 – 2026
Wong Ho Fung, Tsz Yan Giann Chung | 🏆 Best FYP Award (out of 129 projects)	2025 – 2026

UROP

Tong Yiyao	Fall 2026
Waleed Munir	Fall 2026
Siyu Jiang	Summer 2026
Yik Long Wong	Summer 2026, Fall 2026
Muhammad Zohaib Irfan	Spring 2026, Summer 2026
Pak Ho Lam	Spring 2026, Summer 2026
Abdelrahman Awadalla	Spring 2026, Summer 2026
Arnav Bala	Spring 2026

COMP 4971: Independent Research

LIU Zexuan	Fall 2026
Antariksh Verma	Fall 2025, Spring 2026

COMP 4910: Co-op Program

Muhammad Zohaib Irfan	Fall 2026
Abdullah Imtiaz	Spring 2026

Interns

Olivia Howe | *University of Washington*	Summer 2026
Kushall Saraf | *University of Toronto*	Summer 2026
Martin Tin | *University of Toronto*	Summer 2026
Tong Yiyao | *HKUST*	Summer 2026
Sujal Kaware | *IIT Kharagpur*	Spring 2026
Shuvam Dash | *IIT (ISM) Dhanbad*	Spring 2025
Haichang Li | *George Mason University*	Fall 2025
Tenghao Ji | *University of Michigan, Hong Kong Polytechnic University*	Spring 2025

Student Thesis Committees

Luyu Cheng | *CSE Ph.D. under Dr. Lionel Parreaux*	Summer 2026
Junze Li | *CSE Ph.D. under Dr. Xiaojuan Ma*	Summer 2026
Leixian Shen | *CSE Ph.D. under Dr. Huamin Qu*	Summer 2026
Hanfang Lyu | *CSE Ph.D. under Dr. Xiaojuan Ma*	Summer 2026
Qiaoyi Chen | *CSE Ph.D. under Dr. Xiaojuan Ma*	Spring 2026
Xuanhui Yang | *CSE Ph.D. under Dr. Xiaojuan Ma*	Spring 2026
Zhunis Assem | *CSE Ph.D. under Dr. Xiaojuan Ma*	Spring 2026
Yujia He | *CSE Ph.D. under Dr. Huamin Qu*	Spring 2026
Kangyu Yuan | *CSE Ph.D. under Dr. Xiaojuan Ma*	Spring 2026
Wenshuo Zhang | *CSE Ph.D. under Dr. Huamin Qu*	Fall 2025
Kam Kwai Wong | *CSE Ph.D. under Dr. Huamin Qu*	Fall 2025
Liwenhan Xie (Shelly) | *CSE Ph.D. under Dr. Huamin Qu*	Fall 2025
Weiqi Lu | *CSE Ph.D. under Dr. Shing-Chi Cheung*	Summer 2025
Yue Yu | *CSE M.Phil. under Dr. Huamin Qu*	Summer 2025
Zuyu Xu | *CSE Ph.D. under Dr. Xiaojuan Ma*	Spring 2025
Zeyu Huang | *CSE Ph.D. under Dr. Xiaojuan Ma*	Spring 2025
Xinyang Wu | *CSE Ph.D. under Dr. Andrew Horner*	Spring 2025
Man Hei Law (Chris) | *CSE Ph.D. under Dr. Andrew Horner*	Spring 2025

Student Mentoring (As a Ph.D. Student at Georgia Tech)

Subham Sah | *PhD CS Student, UNC Charlotte.*	2023 – 25
Rishab Mitra | *BS CS (Fall'21); MS CS student, Georgia Tech.*	2020 – 22; 2023 – 25
Kaustubh Odak | *MS CS Student, Georgia Tech.*	2022 – 24
Sichen Jin | *PhD CS Student, Georgia Tech.*	2023
Surya Chakraborty | *MS CS (Spring'23), Georgia Tech.*	2022 – 23
Shivam Agarwal | *MS CS Student, Georgia Tech.*	2022 – 23
Jamal Paden | *BS CS (Spring'23), Georgia Tech.*	2021 – 23
Arpit Mathur | *MS HCI (Spring'21), Georgia Tech.*	2021
Adam Coscia | *PhD HCC Student, Georgia Tech.*	2020 – 21

Invited Talks

Human-Centric AI Tools for Visual Analytics | *Zhejiang University International Summer School of Visual Analytics*	Summer 2026
Human-Centric AI Tools for Visual Analytics | *ChinaVis International Forum*	Summer 2026
Human-Centric AI Guidance for Visual Analytics | *Zhejiang University (∼30 attendees)*	Spring 2026
Human-Centric AI Guidance for Visual Analytics | *Tongji University (∼50 attendees)*	Spring 2026
Human-Centric AI Guidance for Visual Analytics | *ShanghaiTech University (∼50 attendees)*	Spring 2026
Building Human-Centered Visual Analytics Tools | *HKUST PG Seminar (∼120 attendees)*	Fall 2025
Human-Centric AI Guidance for Visual Analytics | *IISc Bangalore (∼40 attendees)*	Summer 2025
Human-Centric AI Guidance for Visual Analytics | *IIT Bombay (∼80 attendees)*	Summer 2025
Human-Centric AI Guidance for Visual Analytics | *IIT Madras (∼30 attendees)*	Summer 2025
Human-Centric AI Guidance for Visual Analytics | *IIT Kharagpur (∼40 attendees)*	Summer 2025
Human-Centric AI Guidance for Visual Analytics | *IIT Guwahati (∼50 attendees)*	Summer 2025
Human-Centric AI Guidance for Visual Analytics | *IIT (ISM) Dhanbad (∼50 attendees)*	Summer 2025
Human-Centric AI Guidance for Visual Analytics | *IIIT Bangalore (∼40 attendees)*	Summer 2025
Building Human-Centered Visual Analytics Tools | *ERFI Lab, City U (∼10 attendees)*	Spring 2025
Building Human-Centered Tools to Enhance Visual Analytics | *HKUST UG Seminar (∼100 attendees)*	Spring 2025
Designing, Developing, and Democratizing Guidance for Visual Analytics | *HKUST CSE RTF (∼100 attendees)*	Spring 2025
Designing, Developing, and Democratizing Guidance for Visual Analytics | *The University of Maryland (∼25 attendees)*	Fall 2024
Choropleth Maps: How They can Trick You and What You Can Do About It | *IPaT Lunch Lecture (∼50 attendees)*	Spring 2024
Guidance Communication in Mixed-Initiative Visual Analytics | *GVU Brown Bag Lightning Talk (∼50 attendees)*	Spring 2023

Invited Panels

Engineering Research for Global Challenges cum Info Webinar on PG Studies | *HKUST (∼1500 attendees)* Fall 2025
Towards Scalable, Responsible, and Reliable Application of Agentic Systems | *DAIS Workshop at ICDE'25 (∼30 attendees)* Spring 2025
Universal Design for Learning | Lead Facilitator, CTL Workshop, Georgia Tech *(∼35 attendees)* Fall 2023
Supporting Student Academic Well-being | Co-Facilitator, CTL Workshop, Georgia Tech *(∼200 attendees)* Fall 2023
TA Development Academy | *Panel organized by Center for Teaching and Learning at Georgia Tech (∼150 attendees)* Fall 2022
Why consider a PhD at Georgia Tech? | *Info Session and Panel organized by Georgia Tech (∼100 attendees)* Fall 2022, 2021
Why consider a career at Adobe? | *Info Session organized by Adobe Research at Georgia Tech (∼50 attendees)* Fall 2021

Organized Workshops

Universal Design for Learning | *Lead Facilitator, CTL Workshop, Georgia Tech (∼35 attendees)* Fall 2023
Supporting Student Academic Well-being | *Co-Facilitator, CTL Workshop, Georgia Tech (∼200 attendees)* Fall 2023

Teaching

Instructor | *COMP 6411D: Data Visualization, HKUST* Fall 2026
Instructor | *COMP 4462: Data Visualization, HKUST* | *59 students* Spring 2026
Instructor | *COMP 6411D: Data Visualization, HKUST* | *35 students* Fall 2025
Head Teaching Assistant (TA) | *CS 7451: Human-Centered Data Analysis, Georgia Tech* Fall 2024
Future Faculty Teaching Observer | *Center for Teaching and Learning, Georgia Tech* 2023 – 24
TA Training and Workshop Facilitator | *Center for Teaching and Learning, Georgia Tech* 2023 – 24
🏆 **Graduate Teaching Fellow** | *Center for Teaching and Learning, Georgia Tech* 2023 – 24
Head Teaching Assistant (TA) | *CS 4460: Introduction to Information Visualization, Georgia Tech* | 🏆 *Thank A Teacher Award.* Fall 2023
Guest Lecturer (x2) | *CS 4460: Introduction to Information Visualization, Georgia Tech.* Spring 2023
Head Teaching Assistant (TA) | *CS 4460: Introduction to Information Visualization, Georgia Tech* | 🏆 *Outstanding TA Award.* Fall 2021

Service: Journals and Conferences

Conference Organizing Committee Member

IEEE VIS (Archive Chair) 2026

Conference Program Committee Member

IEEE VIS 2025
ACM IUI 2024, 2025
ACM CHI Late Breaking Work 2025, 2026

Conference Student Volunteer

IEEE VIS 2022

Conference and Journal Reviewer

🏆: *Special Recognition for Outstanding Review / Highly Useful Review*

IEEE TVCG Journal 2022 –
IEEE VIS | 🏆🏆🏆 2019, 2021 –
ACM CHI | 🏆 2021 –
ACM IUI | 🏆🏆🏆 2024 –
ACL RR 2026
ACM UIST 2024
IEEE PacificVIS 2021 – 22, 2024
IEEE EuroVis | 🏆 2021 – 23

Service: Other Volunteering Duties and Roles

Teaching Innovation Committee, Department of CSE | *HKUST*	2025 – 27
Undergraduate Committee, Department of CSE | *HKUST*	2025 – 27
Member of the Diversity, Equity, Inclusion (DEI) Council, Office of the Provost | *Georgia Tech.*	2023 – 24
Webmaster, GT Visualization Lab | *Georgia Tech.*	2021 – 24
System Administrator, GT Visualization Lab | *Georgia Tech.*	2021 – 24
Support one student's high school education every year | *MindTree Campus School, IIT Mandi*	2020 – 25
Student Coordinator, Career and Placement Cell | *IIT Mandi.*	2013 – 15
Computer tutor to school students | *Bhumi NGO, Bengaluru*	2016 – 17
English tutor to school students | *PRAYAS, IIT Mandi*	2014 – 15
Volunteer | *National Service Scheme (NSS), IIT Mandi*	2011 – 15
Scribe for High-School Students with Dyslexia/ADHD | *C.N.M. School, Mumbai*	2008 – 09