

# Chenyang Zhang [website](#)

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| CONTACT INFORMATION | School of Interactive Computing<br>College of Computing<br>Georgia Institute of Technology<br>Atlanta, GA 30332 USA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ☎ (217) 979-1621<br>@ <a href="mailto:chenyang.zhang@gatech.edu">chenyang.zhang@gatech.edu</a><br>i <a href="http://www.chenyang.me">www.chenyang.me</a><br>in @chenyangz |
| RESEARCH INTERESTS  | Human-Computer Interaction (HCI), AR/VR Interaction, Spatial Computing, Agentic AI, Data Visualization                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                           |
| EDUCATION           | <b>Georgia Institute of Technology</b> , Atlanta, Georgia USA<br>Ph.D. in Human-Centered Computing Aug. 2024 - present<br>Advisor: Yalong Yang<br><b>University of Illinois Urbana-Champaign</b> , Urbana, Illinois USA<br>Master of Computer Science (MCS) GPA: 3.82/4.0 Aug. 2022 - Dec. 2023<br>Advisor: Elahe Soltanaghahi, Sarah Sterman<br><b>ShanghaiTech University</b> , Shanghai, Shanghai China<br>B.Eng. in Computer Science GPA: 3.57/4.0 Sep. 2018 - Jun. 2022<br>Advisor: Quan Li                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                           |
| RESEARCH EXPERIENCE | <b>Georgia Institute of Technology</b> , Atlanta, Georgia USA<br><i>Graduate Research Assistant (Advisor: Yalong Yang)</i> 2024 - present<br>I believe the next generation of computing will move beyond flat screens and become deeply integrated with the physical world. My research explores this future through 1) combining <b>XR and AI</b> to build intelligent systems that understand people, activities, and physical environments, 2) designing <b>spatial interfaces</b> that rethink how information and applications are organized and experienced beyond traditional screens, and 3) developing <b>spatial interactions</b> that enable intuitive, expressive, and low-effort ways to interact with digital content in space.<br><b>Harvard University</b> , Visual Computing Group, Cambridge, Massachusetts USA<br><i>Research Assistant (Advisors: Zhutian Chen, Hanspeter Pfister)</i> 2023<br>Adaptive situated visualization through human-AI collaboration, developing a declarative visualization grammar for LLMs and a real-time controller that adapts AR visualizations to designer intent and context.<br><b>University of Illinois Urbana-Champaign</b> , Urbana, Illinois USA<br><i>Graduate Research Assistant (Advisor: Elahe Soltanaghahi)</i> 2022 - 2023<br><b>Intuitive gaze-depth interaction for hands-free selection in VR.</b> Developing a hands-free VR selection method that leverages binocular gaze depth information and conducting multiple user studies to improve usability and learnability through iterative design.<br><i>Graduate Research Assistant (Advisor: Sarah Sterman)</i> 2023<br>Qualitative study on how documentation shapes teaching and learning in Physical Computing courses, based on open coding of syllabi and interviews with instructors.<br><b>ShanghaiTech University</b> , Shanghai, China<br><i>Undergraduate Research Assistant (Advisor: Quan Li)</i> 2021 - 2022<br>Visual analytics systems for e-commerce, medical research, and system programming.<br><i>Undergraduate Research Assistant (Advisor: Shenghua Gao)</i> 2020 - 2021<br>Computer vision research on image segmentation applied for medical imaging. |                                                                                                                                                                           |

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| INDUSTRY<br>EXPERIENCE      | <p><b>Google</b>, Seattle, Washington USA</p> <p><i>Student Researcher (Advisor: Eric J. Gonzalez, Mar Gonzalez-Franco)</i> Summer 2025</p> <p>Bringing web elements into 3D physical space and exploring spatialized web browsing experience in XR headsets. <a href="#">[project page]</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| PUBLICATIONS                | <p><b>Chenyang Zhang</b>, Haoyang Yang, Tianjian Wei, Mar Gonzalez-Franco, Yalong Yang, Eric J Gonzalez. <a href="#">Break the Window: Exploring Spatial Decomposition of Webpages in XR</a>. In <i>the ACM Symposium on Virtual Reality Software and Technology</i>. VRST 2026 · Full Paper CHI 2026 · Poster</p> <p>Haoyang Yang, <b>Chenyang Zhang</b>, Elliott H. Faa, Weijian Liu, Lily Seika Chisholm, Benjamin Lee, David Saffo, Feiyu Lu, Blair MacIntyre, Yalong Yang. <a href="#">CrossAtlas: Evaluating Projection Techniques for Spatial Referencing in Cross-Reality Collaboration</a>. In <i>the IEEE International Symposium on Mixed and Augmented Reality</i>. ISMAR 2026 · Full Paper</p> <p><b>Chenyang Zhang</b>, Tiffany S Ma, John Andrews, Eric J Gonzalez, Mar Gonzalez-Franco, Yalong Yang. <a href="#">ForcePinch: Force-Responsive Spatial Interaction for Tracking Speed Control in XR</a>. In <i>the ACM Symposium on User Interface Software and Technology</i>. UIST 2025 · Full Paper</p> <p>Laixin Xie, <b>Chenyang Zhang</b>, Ruofei Ma, Xingxing Xing, Wei Wan, Quan Li. <a href="#">ASight: Fine-tuning Auto-Scheduling Optimizations for Model Deployment via Visual Analytics</a>. In <i>IEEE Transactions on Visualization and Computer Graphics</i>. TVCG · Journal Paper</p> <p>Yang Ouyang, <b>Chenyang Zhang</b>, He Wang, Tianle Ma, Chang Jiang, Yuheng Yan, Zuoqin Yan, Xiaojuan Ma, Chuhan Shi, Quan Li. <a href="#">A Two-Phase Visualization System for Continuous Human-AI Collaboration in Sequelae Analysis and Modeling</a>. In <i>IEEE Transactions on Visualization and Computer Graphics (Proc. VIS 2024)</i>. VIS 2024 · Short Paper</p> <p><b>Chenyang Zhang*</b>, Tiansu Chen*, Eric Shaffer, Elahe Soltanaghahi. <a href="#">FocusFlow: 3D Gaze-Depth Interaction in Virtual Reality Leveraging Active Visual Depth Manipulation</a>. In <i>the ACM CHI conference on Human Factors in Computing Systems</i>. CHI 2024 · Full Paper UIST 2023 · Demo</p> <p>Chen Zhu-Tian, <b>Chenyang Zhang</b>, Qianwen Wang, Jakob Troidl, Simon Warchol, Johanna Beyer, Nils Gehlenborg, Hanspeter Pfister. <a href="#">Beyond Generating Code: Evaluating GPT on a Data Visualization Course</a>. In <i>IEEE VIS Workshop on Visualization Education, Literacy, and Activities</i>. VIS 2023 · EduVis Workshop</p> <p>Yang Ouyang, Yuchen Wu, He Wang, <b>Chenyang Zhang</b>, Furui Cheng, Chang Jiang, Lixia Jin, Yuanwu Cao, Quan Li. <a href="#">Leveraging Historical Medical Records as a Proxy via Multimodal Modeling and Visualization to Enrich Medical Diagnostic Learning</a>. In <i>IEEE Transactions on Visualization and Computer Graphics (Proc. VIS 2023)</i>. VIS 2023 · Full Paper</p> <p><b>Chenyang Zhang</b>, Xiyuan Wang, Chuyi Zhao, Yijing Ren, Tianyu Zhang, Zhenhui Peng, Xiaomeng Fan, Xiaojuan Ma, Quan Li. <a href="#">PromotionLens: Inspecting Promotion Strategies of Online E-commerce via Visual Analytics</a>. In <i>IEEE Transactions on Visualization and Computer Graphics (Proc. VIS 2022)</i>. VIS 2022 · Full Paper</p> <p>Junhao Hu, <b>Chenyang Zhang</b>, Kang Zhou, Shenghua Gao. <a href="#">Chest X-Ray Diagnostic Quality Assessment: How Much Is Pixel-Wise Supervision Needed?</a>. In <i>IEEE Transactions on Medical Imaging</i> 41.7. TMI 2022 · Full Paper</p> |
| CONFERENCE<br>PRESENTATIONS | <p><a href="#">Break the Window: Exploring Spatial Decomposition of Webpages in XR</a><br/>CHI 2026, Barcelona, Spain.</p> <p><a href="#">ForcePinch: Force-Responsive Spatial Interaction for Tracking Speed Control in XR</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

UIST 2025, Busan, South Korea.

**FocusFlow: 3D Gaze-Depth Interaction in Virtual Reality Leveraging Active Visual Depth Manipulation**

CHI 2024, Honolulu, Hawaii, USA.

**PromotionLens: Inspecting Promotion Strategies of Online E-commerce via Visual Analytics**

VIS 2022, Oklahoma City, Oklahoma, USA.

HONORS AND  
AWARDS

|                                                                         |      |
|-------------------------------------------------------------------------|------|
| ShanghaiTech University Merit Student (top 2%)                          | 2021 |
| Meritorious Winner of COMAP's Mathematical Contest in Modeling (top 7%) | 2021 |
| Second Prize of Shanghai College Students Social Survey Competition     | 2019 |

TEACHING

**ShanghaiTech University**, Shanghai, China

*Teaching Assistant*

2021 - 2022

*Introduction to Information Science & Technology*, Fall 2021.

*Design Thinking and Social Design in China*, Fall 2021.

**Kedu No. 1 Primary School**, Qiannan Buyi and Miao Autonomous Prefecture, China

*Volunteer Teacher*

Jul. 2019

Providing general education courses to primary school students, including science, art, sports and adolescent education. Fieldwork on China's poverty reduction initiatives. [\[presentation video\]](#)

SKILLS

**Technical Areas:** Extended Reality (XR), Data Visualization, AI&ML, Computer Graphics, Web Programming.

**Research Methods:** Human-Centered Design, Quantitative & Qualitative Study, Interview.

**Tools & Platforms:** Unity, WebXR, ARKit, Blender, Cinema 4D, Adobe Ae, Figma.

**Languages:** Mandarin Chinese, English, Visualization .