# Yue Jiang

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#### Education

2018 - 2020 Master of Science in Computer Graphics

University of Maryland, College Park, USA

Supervisor: Prof. Matthias Zwicker

2014 - 2017 Honors Bachelor of Science in Computer Science Specialist and Mathematics Major (High Distinction) [Degree granted in 2018]

University of Toronto, Canada

Supervisor: Prof. Gerald Penn

### **Publications**

- [10] **Yue Jiang**, Marc Habermann, Lingjie Liu, Vladislav Golyanik, Christian Theobalt. Paper in Submission.
  - [9] Yue Jiang\*, Yuwen Lu\*, Jeffrey Nichols, Wolfgang Stuerzlinger, Chun Yu, Christof Lutteroth, Yang Li, Ranjitha Kumar, Toby Jia-Jun Li. Computational Approaches for Understanding, Generating, and Adapting User Interfaces. In Proceedings of the 39th Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2022 Workshop Organization).
  - [8] Jiao Sun, Tongshuang Wu, **Yue Jiang**, Ronil Awalegaonkar, Xi Victoria Lin, Diyi Yang. Pretty Princess vs. Successful Leader: Gender Roles in Greeting Card Messages. *In Proceedings of the 39th Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2022)*.
  - [7] Yue Jiang, Wolfgang Stuerzlinger, Christof Lutteroth. ReverseORC: Reverse Engineering of Resizable User Interface Layouts with OR-Constraints. In Proceedings of the 39th Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2021).
  - [6] Karan Ahuja, **Yue Jiang**, Mayank Goel, Chris Harrison. Vid2Doppler: Synthesizing Doppler Radar Data from Videos for Training Privacy-Preserving Activity Recognition. *In Proceedings of the 39th Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2021)*.
  - [5] Zhicong Lu, **Yue Jiang**, Chenxinran Elise Shen, Margaret C Jack, Daniel Wigdor, Mor Naaman. Study of Perceptions of COVID-19 Misinformation in China. *In Proceedings of the 24th ACM Conference on Computer-Supported Cooperative Work and Social Computing* (**CSCW2021**).
- [4] **Yue Jiang**, Dantong Ji, Zhizhong Han, Matthias Zwicker. SDFDiff: Differentiable Rendering of Signed Distance Fields for 3D Shape Optimization. *Conference on Computer Vision and Pattern Recognition (CVPR 2020 Oral (Top 5%)*).
- [3] **Yue Jiang**, Wolfgang Stuerzlinger, Matthias Zwicker, Christof Lutteroth. ORCSolver: An Efficient Solver for Adaptive GUI Layout with OR-Constraints. *In Proceedings of the 38th Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2020)*.
- [2] Zhicong Lu, **Yue Jiang**, Cheng Lu, Mor Naaman, Daniel Wigdor. The Government's Dividend: Complex Perceptions of Social Media Misinformation in China. *In Proceedings of the 38th Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2020)*.
- [1] **Yue Jiang**, Ruofei Du, Christof Lutteroth, Wolfgang Stuerzlinger. ORCLayout: Adaptive GUI Layout with OR-Constraints. *In Proceedings of the 37th Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2019*).

# Patent

[1] **Yue Jiang**, Vlad Morariu, Christopher Tensmeyer, Rajiv Jain, Varun Manjunatha. Responsive Document Using OR Constraint Optimization (Under Review)

#### Demo

[1] **Yue Jiang**. DocShop: Bringing Document Content to Life (Mentor: Vlad Morariu). 2020 Adobe Research Project Expo

# Professional Experience and Internship

- Oct 2020 Research Candidate
- Dec. 2021 Max Planck Institute for Informatics (MPII), Germany

Supervisor: Prof. Christian Theobalt

- Developed a system for high-fidelity and expressive capture of human performances from monocular videos (A paper in submission)
- June 2020 Research Intern
- Aug 2020 Carnegie Mellon University, Pennsylvania, USA

Supervisor: Chris Harrison

- Developed a privacy-preserving activity recognition system based on Doppler radar data (Published at CHI2021).
- Mar 2020 Research Intern
- Aug 2020 Adobe Research, College Park, Maryland, USA

Supervisor: Vlad Morariu

- Document Intelligence Lab.
- Created a new document layout with dynamic viewing. (A paper in submission)
- May 2017 Software Engineer
- April 2018 **Intel Corporation**, San Jose, California
  - Programmable Intellectual Property Engineering (PIPE) Infrastructure Group.
  - Developed software tools for all the FPGA IP groups at Intel.

# Academic Service (Program Committee / Session Chair)

- 2021 **Session Chair**, Interaction and Touch Session, MobileHCI
- 2021 Now ACM SIGGRAPH Research Development Committee DEI and Accessibility
- 2021 Now Co-Organizer Seminar of HCI for Chinese HCI Researchers around the World
  - 2021 Ph.D. & Master Admission Committee Member, University of Maryland, College Park, USA
  - 2021 **Program Committee Member (PC)**, ACM IUI Demos and Posters
  - 2021 Associate Chair (AC), CHI Late Breaking Work (SIGCHI Short Paper)
  - 2020 Ph.D. & Master Admission Committee Member, University of Maryland, College Park, USA
  - 2020 Associate Chair (AC), CHI Late Breaking Work (SIGCHI Short Paper)
  - 2019 Ph.D. & Master Admission Committee Member, University of Maryland, College Park, USA

# Academic Service and Awards (Reviewed 37 papers)

- 2020 Special Recognitions for Outstanding Reviews for CHI2021
- 2020 2022 SIGCHI Conference on Human Factors in Computing Systems (CHI)
- 2019 2021 SIGCHI Late Breaking Work (CHI LBW)
  - 2021 Computers & Graphics (C&C)

- 2020 Australian Computer-Human Interaction Conference (OzCHI)
- 2020 ACM International Conference on Interactive Surfaces and Spaces (ISS)
- 2020 ACM Symposium on Virtual Reality Software and Technology (VRST)
- 2020 ACM User Interface Software and Technology Symposium (UIST)
- 2020 IEEE Virtual Reality Conference (IEEE VR)
- 2019 IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
- 2019 Pacific Graphics (PG)
- 2019 IFIP Conference on Human-Computer Interaction (INTERACT)
- 2019 Graphics Interface (GI)

# Invited Talks

- Dec 7, 2021 **Adaptive User Interface and 3D Reconstruction**, ETH Zurich, Switzerland (Hosted by Christian Holz and Otmar Hilliges)
- Sept 27, 2021 Adaptive User Interface, Seminar of HCI for Chinese HCI Researchers
  - Dec 2, 2020 Adaptive GUI Layout, DGP HCI Session, University of Toronto, Canada (Hosted by DGP Lab)
- Sept 4, 2020 **Responsive Document Using OR Constraint Optimization**, Document Intelligence Lab Talk, Adobe Research, USA (Hosted by Vlad Morariu)
- Aug 18, 2020 **High-Speed, High-Accuracy, Low-Latency Touch Tracking**, Apple Annual Showcase for FIGLab, Apple & CMU, USA (Hosted by Chris Harrison)
- Aug 18, 2020 **Doppler Radar for Activity Recognition**, Apple Annual Showcase for FIGLab, Apple & CMU, USA (Hosted by Chris Harrison)
- July 31, 2020 **High-Speed, High-Accuracy, Low-Latency Touch Tracking**, FIGLab Research Review Presentation, Apple & CMU, USA (Hosted by Chris Harrison)
- July 31, 2020 **Doppler Radar for Activity Recognition**, FIGLab Research Review Presentation, Apple & CMU, USA (Hosted by Chris Harrison)
- July 14, 2020 **Document Layout with OR-Constraints**, Graphics Intelligence Lab Talk, Adobe Research, USA (Hosted by Paul Asente)
- June 27,2020 SDFDiff: Differentiable Rendering of Signed Distance Fields for 3D Shape Optimization, DeeCamp AI Training Camp, AI Institute of Sinovation Ventures, China (Hosted by Ran Zhang (IST Austria))
- May 29, 2020 **ORCSolver: An Efficient Solver for Adaptive GUI Layout with OR-Constraints**, German CHI Week, German HCI, Germany (Hosted by Teresa Hirzle & Christina Schnegass)
- May 20, 2020 **ORCSolver: An Efficient Solver for Adaptive GUI Layout with OR-Constraints**, BathCHI 2020 Seminar, University of Bath, UK (Hosted by Christof Lutteroth)
  - May, 2020 SDFDiff: Differentiable Rendering of Signed Distance Fields for 3D Shape Optimization, Technical Paper Talk at CVPR2020 Session in 3D from Multiview and Sensors, Seattle, USA
  - May, 2020 **ORCSolver: An Efficient Solver for Adaptive GUI Layout with OR-Constraints**, Technical Paper Talk at CHI2020 Session in GUI Design, Honolulu, USA
  - Dec 3, 2019 **ORC Layout: Adaptive GUI Layout with OR-Constraints**, Document Intelligence Lab Talk, Adobe Research, USA (Hosted by Vlad Morariu & Tong Sun)
- July 11, 2019 **ORC Layout: Adaptive GUI Layout with OR-Constraints**, Visual Computing Summer School 2019, Shenzhen University, China (Hosted by Hui Huang)
- May 15, 2019 **Signed Distance Function Based Differentiable Rendering**, Capital Graphics 2019, George Mason University, Arlington, VA, USA (Hosted by Yotam Gingold)

May 7, 2019	<b>ORC Layout: Adaptive GUI Layout with OR-Constraints</b> , Technical Paper Talk at CHI2019 Session in Intelligent Systems and Interfaces, Glasgow, UK (Hosted by Claudio Pinhanez (IBM))
May 2, 2019	<b>ORC Layout: Adaptive GUI Layout with OR-Constraints</b> , UMD HCI Lab BBL Talk, University of Maryland, USA
April 4, 2019	<b>ORC Layout: Adaptive GUI Layout with OR-Constraints</b> , Human-Computer Interaction Lab 36th Annual Symposium, USA (Hosted by Niklas Elmqvist)
April 1, 2019	<b>ORC Layout: Adaptive GUI Layout with OR-Constraints</b> , UMD HCI Lab SIGCHI Paper Talk Session, University of Maryland, USA (Hosted by Hernisa Kacorri)
Jun 21, 2018	<b>Neural Programmer Interpreter</b> , Knowledge Representation and Reasoning Talk Session, University of Toronto, Canada (Hosted by Sheila McIlraith)
Nov 8, 2016	<b>Vector Addition Systems Reachability Problem</b> , Mathematical Linguistics Talk Session, University of Toronto, Canada (Hosted by Gerald Penn)
Oct 25, 2016	<b>Supertagging: A Non-Statistical Parsing-Based Approach</b> , Mathematical Linguistics Talk Session, University of Toronto, Canada (Hosted by Gerald Penn)
Oct 3, 2016	<b>Reachability Problems for Vector Addition Systems</b> , University of Toronto Undergraduate Computer Theory Talk Session, University of Toronto, Canada
July 20, 2016	<b>Reachability Problems and Vector Addition Tree Automata</b> , Undergraduate Summer Research Program (UGSRP) Talk, University of Toronto, Canada
	Teaching Experience
Oct 2021	Co-Instructor - Seminar: Computing the User and their interface
- Feb 2022	Saarland University
	Instructors: Prof. Anna Maria Feit, Yue Jiang, Kevin Baum, Markus Langer
Apr 2021	Co-Supervisor - Seminar: Computer Vision and Machine Learning for Computer Graphics
- Aug 2021	Max Planck Institute for Informatics Instructors: Prof. Christian Theobalt, Dr. Mohamed Elgharib, Dr. Vladislav Golyanik
Jan 2020	Teaching Assistant - CMSC740 Advanced Computer Graphics
- May 2020	Department of Computer Science, University of Maryland
	Instructor: Prof. Matthias Zwicker
Aug 2019	Teaching Assistant - CMSC427 Computer Graphics
- Dec 2019	Department of Computer Science, University of Maryland Instructor: Prof. Matthias Zwicker
Aug 2018	Teaching Assistant - CMSC427 Computer Graphics
- Dec 2018	Department of Computer Science, University of Maryland
	Instructor: Prof. Matthias Zwicker
Jan 2017	Teaching Assistant - CSC263 Data Structures and Analysis
– Apr 2017	Department of Computer Science, University of Toronto
	Instructors: Prof. Sam Toueg and Prof. François Pitt
Sept 2016	Teaching Assistant - CSC263 Data Structures and Analysis
– Dec 2016	Department of Computer Science, University of Toronto Instructor: Prof. David Liu
Jan 2016	Teaching Assistant - CSC165 Mathematical Expression and Reasoning for computer Science

– Apr 2016	Department of Computer Science, University of Toronto Instructors: Dr. Ilir Dema and Dr. Abdallah Farraj
Sept 2015	Peer Tutor - MAT223/224 Linear Algebra I & II
-	Department of Mathematics, University of Toronto
-	Peer Tutor - MAT137 Calculus
•	Department of Mathematics, University of Toronto
_	Teaching Volunteer - High School Mathematics and Physics
	U of Toronto Touching Lives Overseas, Qinyuan, Shanxi Province, China
	Grants and Honours
2021	ACM SIGCHI Gary Marsden Travel Award
Sept. 2020	<u> </u>
•	Adobe Research Gift Grant for Document Intelligent Research (\$10,000)
	Jacob K. Goldhaber Travel Grant Award
	Department of Computer Science Travel Grant Award, University of Maryland
2018 - 2020 Sant 2018	
-	Maryland Center For Women In Computing (MCWIC) Grace Hopper Scholarship Dean's List Scholar, University of Toronto
	New College Council In-Course Scholarship, University of Toronto
2014 - 2015	
2014 2013	Science, University of Toronto
2012	National Olympiad in Biology in Provinces, First Prize
2011	China Adolescents Science and Technology Innovation Contest, First Prize
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	Mentoring Experience
	Mentoring Experience Students Mentored:
2020	Students Mentored:
2020 2021	Students Mentored: Duotun Wang (Research master student at University of Maryland)
2020 2021	Students Mentored:
	Students Mentored: Duotun Wang (Research master student at University of Maryland) Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar super-
2021	Students Mentored: Duotun Wang (Research master student at University of Maryland) Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar supervisor]
2021 2018, 2019	Students Mentored: Duotun Wang (Research master student at University of Maryland) Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar supervisor] Graduate Mentor for Technica (All-Women Hackathon)
2021 2018, 2019	Students Mentored: Duotun Wang (Research master student at University of Maryland) Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar supervisor] Graduate Mentor for Technica (All-Women Hackathon) Graduate Mentor at Maryland Center For Women In Computing (MCWIC) Peer men-
2021 2018, 2019 2018 - 2020	Students Mentored: Duotun Wang (Research master student at University of Maryland) Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar supervisor] Graduate Mentor for Technica (All-Women Hackathon) Graduate Mentor at Maryland Center For Women In Computing (MCWIC) Peer mentoring University Service
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2021 2018, 2019 2018 - 2020 Nov 2019	Students Mentored: Duotun Wang (Research master student at University of Maryland) Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar supervisor] Graduate Mentor for Technica (All-Women Hackathon) Graduate Mentor at Maryland Center For Women In Computing (MCWIC) Peer mentoring University Service Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA
2021 2018, 2019 2018 - 2020 Nov 2019 March 2019	Students Mentored: Duotun Wang (Research master student at University of Maryland) Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar supervisor] Graduate Mentor for Technica (All-Women Hackathon) Graduate Mentor at Maryland Center For Women In Computing (MCWIC) Peer mentoring University Service Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA Ph.D Student Panel Leader for Prospective Students, University of Maryland, USA
2021 2018, 2019 2018 - 2020 Nov 2019 March 2019 Nov 2018	Students Mentored: Duotun Wang (Research master student at University of Maryland) Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar supervisor] Graduate Mentor for Technica (All-Women Hackathon) Graduate Mentor at Maryland Center For Women In Computing (MCWIC) Peer mentoring University Service Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA Ph.D Student Panel Leader for Prospective Students, University of Maryland, USA Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA Department of Mathematics Ambassador, University of Toronto, Canada
2018, 2019 2018 - 2020 Nov 2019 March 2019 Nov 2018 2016	Students Mentored: Duotun Wang (Research master student at University of Maryland) Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar supervisor] Graduate Mentor for Technica (All-Women Hackathon) Graduate Mentor at Maryland Center For Women In Computing (MCWIC) Peer mentoring  University Service Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA Ph.D Student Panel Leader for Prospective Students, University of Maryland, USA Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA Department of Mathematics Ambassador, University of Toronto, Canada  Press Coverage
2021 2018, 2019 2018 - 2020 Nov 2019 March 2019 Nov 2018	Students Mentored: Duotun Wang (Research master student at University of Maryland) Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar supervisor] Graduate Mentor for Technica (All-Women Hackathon) Graduate Mentor at Maryland Center For Women In Computing (MCWIC) Peer mentoring University Service Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA Ph.D Student Panel Leader for Prospective Students, University of Maryland, USA Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA Department of Mathematics Ambassador, University of Toronto, Canada
2018, 2019 2018 - 2020 Nov 2019 March 2019 Nov 2018 2016	Students Mentored: Duotun Wang (Research master student at University of Maryland) Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar supervisor] Graduate Mentor for Technica (All-Women Hackathon) Graduate Mentor at Maryland Center For Women In Computing (MCWIC) Peer mentoring University Service Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA Ph.D Student Panel Leader for Prospective Students, University of Maryland, USA Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA Department of Mathematics Ambassador, University of Toronto, Canada  Press Coverage CMU researchers show potential of privacy-preserving activity tracking using radar —
2021 2018, 2019 2018 - 2020  Nov 2019 March 2019 Nov 2018 2016  May 11, 2021	Students Mentored: Duotun Wang (Research master student at University of Maryland) Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar supervisor] Graduate Mentor for Technica (All-Women Hackathon) Graduate Mentor at Maryland Center For Women In Computing (MCWIC) Peer mentoring  University Service Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA Ph.D Student Panel Leader for Prospective Students, University of Maryland, USA Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA Department of Mathematics Ambassador, University of Toronto, Canada  Press Coverage CMU researchers show potential of privacy-preserving activity tracking using radar — TechCrunch
2018, 2019 2018 - 2020 Nov 2019 March 2019 Nov 2018 2016 May 11, 2021 May 8, 2019	Students Mentored: Duotun Wang (Research master student at University of Maryland)  Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar supervisor]  Graduate Mentor for Technica (All-Women Hackathon)  Graduate Mentor at Maryland Center For Women In Computing (MCWIC) Peer mentoring  University Service  Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA  Ph.D Student Panel Leader for Prospective Students, University of Maryland, USA  Graduate Volunteer for Technica Research Bootcamp, University of Maryland, USA  Department of Mathematics Ambassador, University of Toronto, Canada  Press Coverage  CMU researchers show potential of privacy-preserving activity tracking using radar — TechCrunch  Eases the pain of multiple UI designs — IT Works Solution

# Voluntary Experience

Oct 2021 Student Volunteer for the ACM Symposium on User Interface Software and Technology (UIST2021), Toulouse, France (Virtual).

Sept 2021 Student Volunteer for the ACM International Conference on Mobile Human-Computer Interaction (MobileHCI2021), Toulouse, France (Virtual).

Nov 2020 Student Volunteer for the ACM Interactive Surfaces and Spaces (ISS2020), Lisbon, Portugal (Virtual).

April 2019 Student Volunteer for **Human-Computer Interaction Lab 36th Annual Symposium**, Maryland, USA

May 2016 Volunteer for **Doors Open Toronto 2016**, City Cultural Events, Toronto, Canada

# Technical Skills

Programming: Python, C/C++, Java, Matlab, Perl, CUDA

Other Tools: PyTorch, TensorFlow, OpenGL, OpenCV, Numpy, Scipy, NLTK, Scikit-learn, LateX, SQL,

Splunk, SVN, Github, Perforce, Unity, Fusion360, 3D Max