

# Yue Jiang

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Google Scholar: [shorturl.at/zDN56](https://scholar.google.com/citations?user=zDN56)

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## Education

- 2020 - **Ph.D in Graphics, Vision & Video Group**  
**Max Planck Institute for Informatics (MPII), Germany**  
Supervisor: Prof. Christian Theobalt
- 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

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## Publications

- [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 (CVPR2020 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)*.

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## Patent

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

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## Demo

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

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## Professional Experience

- Mar 2020 Research Intern  
– Aug 2020 **Adobe Research**, College Park, Maryland  
Mentor: Vlad Morariu  
- Document Intelligence Lab.  
- Created a new document layout with dynamic viewing.  
May 2017 Software Engineer  
– April 2018 **Intel Corporation**, San Jose, California  
- Programmable Intellectual Property Engineering (PIPE) Infrastructure Group.  
- Developed software tools for all FPGA IP groups at Intel. (Python, Perl)

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## Academic Service (Program Committee)

- 2021 **Ph.D. & Master Admission Committee Member**, University of Maryland, College Park, USA  
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

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## Academic Service and Awards (Reviewing (33 papers))

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

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## Invited Talks

- 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 **ORC Layout: Adaptive GUI Layout with OR-Constraints**, Technical Paper Talk at CHI2019 Session in Intelligent Systems and Interfaces, Glasgow, UK (Hosted by Claudio Pinhanez (IBM))
- May 2, 2019 **ORC Layout: Adaptive GUI Layout with OR-Constraints**, UMD HCI Lab BBL Talk, University of Maryland, USA
- April 4, 2019 **ORC Layout: Adaptive GUI Layout with OR-Constraints**, Human-Computer Interaction Lab 36th Annual Symposium, USA (Hosted by Niklas Elmqvist)
- April 1, 2019 **ORC Layout: Adaptive GUI Layout with OR-Constraints**, UMD HCI Lab SIGCHI Paper Talk Session, University of Maryland, USA (Hosted by Hernisa Kacorri)
- Jun 21, 2018 **Neural Programmer Interpreter**, Knowledge Representation and Reasoning Talk Session, University of Toronto, Canada (Hosted by Sheila McIlraith)
- Nov 8, 2016 **Vector Addition Systems Reachability Problem**, Mathematical Linguistics Talk Session, University of Toronto, Canada (Hosted by Gerald Penn)
- Oct 25, 2016 **Supertagging: A Non-Statistical Parsing-Based Approach**, Mathematical Linguistics Talk Session, University of Toronto, Canada (Hosted by Gerald Penn)
- Oct 3, 2016 **Reachability Problems for Vector Addition Systems**, University of Toronto Undergraduate Computer Theory Talk Session, University of Toronto, Canada
- July 20, 2016 **Reachability Problems and Vector Addition Tree Automata**, Undergraduate Summer Research Program (UGSRP) Talk, University of Toronto, Canada

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## Teaching Experience

- Jan 2020 CMSC740 **Advanced Computer Graphics**
- May 2020 Department of Computer Science, University of Maryland
- Instructor: Prof. Matthias Zwicker

- Aug 2019 CMSC427 **Computer Graphics**
- Dec 2019 Department of Computer Science, University of Maryland  
Instructor: Prof. Matthias Zwicker
- Aug 2018 CMSC427 **Computer Graphics**
- Dec 2018 Department of Computer Science, University of Maryland  
Instructor: Prof. Matthias Zwicker
- Jan 2017 CSC263 **Data Structures and Analysis**
- Apr 2017 Department of Computer Science, University of Toronto  
Instructors: Prof. Sam Toueg and Prof. Francois Pitt
- Sept 2016 CSC263 **Data Structures and Analysis**
- Dec 2016 Department of Computer Science, University of Toronto  
Instructor: Prof. David Liu
- Jan 2016 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 for MAT223/224 **Linear Algebra I & II**
- Apr 2016 Department of Mathematics, University of Toronto
- Sept 2015 Peer Tutor for MAT137 **Calculus**
- Apr 2016 Department of Mathematics, University of Toronto
- Summer Teaching Volunteer for High School **Mathematics** and **Physics**
- 2014 U of Toronto Touching Lives Overseas, Qinyuan, Shanxi Province, China

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## Grants and Honours

- Sept. 2020 Adobe Research Gift Grant for Document Intelligent Research (\$10,000)
- May 2020 Adobe Research Gift Grant for Document Intelligent Research (\$10,000)
- 2019 Jacob K. Goldhaber Travel Grant Award
- 2019 Department of Computer Science Travel Grant Award, University of Maryland
- 2018 - 2020 Graduate Dean's Scholarship, University of Maryland, College Park (\$10,000)
- Sept. 2018 Maryland Center For Women In Computing (MCWIC) Grace Hopper Scholarship
- 2014 - 2018 Dean's List Scholar, University of Toronto
- 2014 - 2016 New College Council In-Course Scholarship, University of Toronto
- 2014 - 2015 Award for Outstanding Achievement in Mathematical Expression and Reasoning for Computer 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

### **Students Mentored:**

- 2020 Duotun Wang (currently research master student at University of Maryland)
- 2018, 2019 **Graduate Mentor for Technica (All-Women Hackathon)**
- 2018 - 2020 **Graduate Mentor at Maryland Center For Women In Computing (MCWIC) Peer mentoring**

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## University Service

- Nov 2019 **Graduate Volunteer for Technica Research Bootcamp**, University of Maryland, USA  
March 2019 **Ph.D Student Panel Leader for Prospective Students**, University of Maryland, USA  
Nov 2018 **Graduate Volunteer for Technica Research Bootcamp**, University of Maryland, USA  
2016 **Department of Mathematics Ambassador**, University of Toronto, Canada

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## Press Coverage

- 2020 Our ORC Layout has been applied in products including Adobe Acrobat and Phase <https://phase.com> in real life.  
May 8, 2019 **Eases the pain of multiple UI designs** – IT Works Solution  
May 7, 2019 **New open source software eases the pain of multiple UI designs** – Phys.org  
May 7, 2019 **New software eases the pain of multiple UI designs** – University of Bath, UK

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## Voluntary Experience

- Nov 2020 Student Volunteer for ACM Interactive Surfaces and Spaces (**ISS2020**), Lisbon, Portugal  
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

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## 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

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## References

Mentors and collaborators who have written references for me:

- Prof. Christian Theobalt** – Professor, Max Planck Institute for Informatics, Germany  
**Prof. Wolfgang Stuerzlinger** – Professor, Simon Fraser University, Canada  
**Prof. Christof Lutteroth** – Associate Professor, University of Bath, UK  
**Prof. Matthias Zwicker** – Professor, University of Maryland, College Park, USA  
**Prof. Gerald Penn** – Professor, University of Toronto, Canada  
**Prof. Sam Toueg** – Professor, University of Toronto, Canada