# Yue Jiang

*yuejiang@mpi-inf.mpg.de*

*Website: urlhttps://yuejiang-nj.github.io/*
*LinkedIn: urlwww.linkedin.com/in/yuejianguoft*
*Google Scholar:* `shorturl.at/zDN56`

## 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

## 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**).*

## 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

| | |
|---|---|
| June 2020 – Aug 2020 | Research Intern<br>**Carnegie Mellon University**, Pennsylvania, USA<br>Mentor: Chris Harrison<br>- Developed a privacy-preserving activity recognition system based on Doppler radar data (Published at CHI2021). |
| Mar 2020 – Aug 2020 | Research Intern<br>**Adobe Research**, College Park, Maryland, USA<br>Mentor: Vlad Morariu<br>- Document Intelligence Lab.<br>- Created a new document layout with dynamic viewing. |
| May 2017 – April 2018 | Software Engineer<br>**Intel Corporation**, San Jose, California<br>- Programmable Intellectual Property Engineering (PIPE) Infrastructure Group.<br>- Developed software tools for all FPGA IP groups at Intel. |

## Academic Service (Program Committee / Session Chair)

| | |
|---|---|
| 2021 | **Session Chair**, Interaction and Touch Session, MobileHCI |
| 2021 - Now | **Co-Organizer - Seminar of HCI for Chinese HCI Researchers around the World** |
| 2021 - Now | **ACM SIGGRAPH Research Development Committee — DEI and Accessibility** |
| 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 34 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) |

## Invited Talks

| | |
|---|---|
| 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 | **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 |

## Teaching Experience

| | |
|---|---|
| Oct 2021 – Feb 2022 | **Instructor - Seminar: Computing the User and their interface** <br> Saarland University <br> Instructors: Prof. Anna Maria Feit, Yue Jiang, Kevin Baum, Markus Langer |
| Apr 2021 – Aug 2021 | **Co-Supervisor - Seminar: Computer Vision and Machine Learning for Computer Graphics** <br> Max Planck Institute for Informatics <br> Instructors: Prof. Christian Theobalt, Dr. Mohamed Elgharib, Dr. Vladislav Golyanik |
| Jan 2020 – May 2020 | **Teaching Assistant** - CMSC740 **Advanced Computer Graphics** <br> Department of Computer Science, University of Maryland <br> Instructor: Prof. Matthias Zwicker |
| Aug 2019 – Dec 2019 | **Teaching Assistant** - CMSC427 **Computer Graphics** <br> Department of Computer Science, University of Maryland <br> Instructor: Prof. Matthias Zwicker |
| Aug 2018 – Dec 2018 | **Teaching Assistant** - CMSC427 **Computer Graphics** <br> Department of Computer Science, University of Maryland <br> Instructor: Prof. Matthias Zwicker |
| Jan 2017 – Apr 2017 | **Teaching Assistant** - CSC263 **Data Structures and Analysis** <br> Department of Computer Science, University of Toronto <br> Instructors: Prof. Sam Toueg and Prof. Francois Pitt |
| Sept 2016 – Dec 2016 | **Teaching Assistant** - CSC263 **Data Structures and Analysis** <br> Department of Computer Science, University of Toronto <br> Instructor: Prof. David Liu |
| Jan 2016 – Apr 2016 | **Teaching Assistant** - CSC165 **Mathematical Expression and Reasoning for computer Science** <br> Department of Computer Science, University of Toronto <br> Instructors: Dr. Ilir Dema and Dr. Abdallah Farraj |
| Sept 2015 – Apr 2016 | **Peer Tutor** - MAT223/224 **Linear Algebra I & II** <br> Department of Mathematics, University of Toronto |
| Sept 2015 – Apr 2016 | **Peer Tutor** - MAT137 **Calculus** <br> Department of Mathematics, University of Toronto |
| 2014 | **Teaching Volunteer** - High School **Mathematics** and **Physics** <br> U of Toronto Touching Lives Overseas, Qinyuan, Shanxi Province, China |

## Grants and Honours

| | |
|---|---|
| 2021 | ACM SIGCHI Gary Marsden Travel Award |
| 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 |

## Mentoring Experience

**Students Mentored:**

| | |
|---|---|
| 2020 | Duotun Wang (Research master student at University of Maryland) |
| 2021 | Kartik Teotia (Research master student at Max Planck Institute for Informatics) [Seminar supervisor] |
| 2018, 2019 | **Graduate Mentor for Technica (All-Women Hackathon)** |
| 2018 - 2020 | **Graduate Mentor at Maryland Center For Women In Computing (MCWIC) Peer mentoring** |

## 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 |

## Press Coverage

| | |
|---|---|
| May 11, 2021 | **CMU researchers show potential of privacy-preserving activity tracking using radar** – TechCrunch |
| 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 |

## 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 |

## 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