# Yue Jiang

### yue.jiang@aalto.fi

Website: https://yuejiang-nj.github.io/ LinkedIn: www.linkedin.com/in/yuejianguoft Google Scholar: shorturl.at/zDN56

My research focuses on developing computational optimization and AI methods to create intelligent user interfaces (UIs) that adapt to human needs. Drawing on my research insights in human-computer interaction, computer vision, and deep learning, I aim to develop human-centered technologies that enhance human capabilities by adapting to users and their contexts.

#### Education

#### 2025 Ph.D. in Intelligent Systems

Aalto University & Finnish Center for Artificial Intelligence (FCAI), Finland

- Meta PhD Fellowship (21 worldwide selected from 3,200+ applicants)
- Google Europe Students with Disabilities Scholarship (10 in Europe)
- Nokia Scholarship
- Heidelberg Laureate Forum Young Researcher
- UCSD Data Science Rising Star

Supervisors: Prof. Antti Oulasvirta and Prof. Vikas Garg

#### Jan 2024 Visiting Ph.D. Student

- May 2024 Human Computer Interaction Institute (HCII), Carnegie Mellon University, USA

Supervisor: Prof. Jeffrey Bigham

#### 2020 Master of Science in Computer Graphics

University of Maryland, College Park, USA

Supervisor: Prof. Matthias Zwicker

## 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

#### Full Paper Publications

- [17] **Yue Jiang\***, Zixin Guo\*, Hamed Rezazadegan Tavakoli, Luis A. Leiva, Antti Oulasvirta. EyeFormer: Predicting Personalized Scanpaths with Transformer-Guided Reinforcement Learning. *In Proceedings of the 37th Annual ACM Symposium on User Interface Software and Technology* (**UIST 2024**).
- [16] Yi-Hao Peng, Faria Huq, **Yue Jiang**, Jason Wu, Amanda Li, Jeffrey P. Bigham, and Amy Pavel. DreamStruct: Understanding Slides and UIs via Programmable Synthetic Data Generation. *European Conference on Computer Vision (ECCV2024)*.
- [15] **Yue Jiang**, Changkong Zhou, Vikas Garg\*, Antti Oulasvirta\*. Graph4GUI: Graph Neural Networks for Representing Graphical User Interfaces. In Proceedings of the 42nd Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2024).
- [14] Maryam Taeb, Amanda Swearngin, Eldon Schoop, Ruijia Cheng, **Yue Jiang**, Jeffrey Nichols. AXNav: Replaying Accessibility Tests from Natural Language. *In Proceedings of the 42nd Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2024)*.

- [13] **Yue Jiang**, Christof Lutteroth, Rajiv Jain, Christopher Tensmeyer, Varun Manjunatha, Wolfgang Stuerzlinger, Vlad Morariu. FlexDoc: Flexible Document Adaptation through Optimizing both Content and Layout. *In Proceedings of the IEEE Symposium on Visual Languages and Human-Centric Computing* (VL/HCC2024).
- [12] Yao Wang, **Yue Jiang**, Zhiming Hu, Constantin Ruhdorfer, Mihai Bâce, Andreas Bulling. VisRecall++: Analysing and Predicting Visualisation Recallability from Gaze Bahaviour. *In Proceedings of the ACM on Human-Computer Interaction (PACM-HCI)*. Presented at the 2024 ACM Symposium on Eye Tracking Research and Applications (ETRA2024).
- [11] Parvin Emami, **Yue Jiang**, Zixin Guo, Luis A. Leiva. Impact of Design Decisions in Scanpath Modeling. In Proceedings of the ACM on Human-Computer Interaction (**PACM-HCI**). Presented at the 2024 ACM Symposium on Eye Tracking Research and Applications (**ETRA2024**).
- [10] **Yue Jiang**, Luis A. Leiva, Hamed Rezazadegan Tavakoli, Paul R. B. Houssel, Julia Kylmala, Antti Oulasvirta. UEyes: Understanding Visual Saliency across User Interface Types. *In Proceedings of the 41st Annual SIGCHI Conference on Human Factors in Computing Systems (CH12023)*.
  - [9] **Yue Jiang**, Marc Habermann, Vladislav Golyanik, Christian Theobalt. HiFECap: High-Fidelity and Expressive Capture of Human Performances from Monocular Videos. *In Proceedings of the 2022 British Machine Vision Virtual Conference* (**BMVC2022**).
  - [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 40th Annual SIGCHI Conference on Human Factors in Computing Systems* (**CHI2022 Best Paper Honorable Mention**).
  - [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*).

#### In-Submission Full Papers

- [7] Aryan Garg\*, **Yue Jiang\* (co-first author & project advisor)**, Antti Oulasvirta. Controllable GUI Generation. (*In submission to CHI2025*).
- [6] Zixin Guo\*, **Yue Jiang\* (co-first author)**, Aini Putkonen, Luis Leiva, Antti Oulasvirta. Scanpath Prediction for Visual Search on Graphical User Interfaces. (*In submission to CVPR2025*).
- [5] **Yue Jiang**, Elham Sadr, Christof Lutteroth, Wolfgang Stuerzlinger. Layout-Less-Layout: The  $L^3$ -Editor, a GUI Editor for Resizable Layouts. (*In submission to IJHCS*).

- [4] Aini Putkonen, **Yue Jiang**, Jingchun Zeng, Olli Tammilehto, Jussi P. P. Jokinen, Antti Oulasvirta. Understanding Visual Search in Graphical User Interfaces. (*IJHCS Minor Revision*).
- [3] Han Xiao, Ashwin Ram, **Yue Jiang**, Rui Yao, Youqi Wu, Bowen Wang, Wolfgang Stuerzlinger, Shengdong Zhao. AdaptVid: Adapting Video Lectures to Head-Mounted Displays. (*In submission to IMWUT2025*).
- [2] **Yue Jiang**, Eldon Schoop, Amanda Swearngin, Jeffrey Nichols. ILuvUI: Instruction-tuned LangUage-Vision modeling of UIs from Machine Conversations. (*In Submission to IUI2025*).
- [1] Parvin Emami, **Yue Jiang**, Antti Oulasvirta, Luis A. Leiva. User Interface Optimization with Hierarchical Reinforcement Learning. (*To be submitted to Siggraph 2025 Conference Paper Track*).

#### Workshop Papers, Extended Abstracts, and Doctoral Consortium

- [12] **Yue Jiang**. Computational Representations for Graphical User Interfaces. *In Proceedings of the 42st Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2024 Doctoral Consortium*).
- [11] **Yue Jiang**, Eldon Schoop, Amanda Swearngin, Jeffrey Nichols. ILuvUI: Instruction-tuned LangUage-Vision modeling of UIs from Machine Conversations. *In Proceedings of the 42st Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2024 Workshop Paper)*.
- [10] Busra Asan, Lena Hegemann, **Yue Jiang (project advisor)**, Antti Oulasvirta. Suggesting Colors for UI Designs with Graph Neural Networks. *In Proceedings of the 42st Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2024 Workshop Paper)*.
  - [9] Yue Jiang\*, Yuwen Lu\*, Tiffany Knearem, Clara E Kliman-Silver, Christof Lutteroth, Toby Jia-Jun Li, Jeffrey Nichols, Wolfgang Stuerzlinger. Computational Methodologies for Understanding, Automating, and Evaluating User Interfaces. In Proceedings of the 41st Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2024 Extended Abstract).
  - [8] Yue Jiang, Yuwen Lu, Christof Lutteroth, Toby Jia-Jun Li, Jeffrey Nichols, Wolfgang Stuerzlinger. The Future of Computational Approaches for Understanding and Adapting User Interfaces. In Proceedings of the 41st Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2023 Extended Abstract).
  - [7] Yao Wang, Ludwig Sidenmark, Teresa Hirzle, **Yue Jiang**, Andreas Bulling. 8th International Workshop on Pervasive Eye Tracking and Mobile Eye-based Interaction (PETMEI). ACM Symposium of Eye Tracking Research and Applications (ETRA2023 Extended Abstract).
  - [6] Garreth Tigwell, Yue Jiang. Disability Semantics for Academic Writing. AccessSIGCHI, 2023.
  - [5] **Yue Jiang**, Luis A. Leiva, Hamed Rezazadegan Tavakoli, Paul R. B. Houssel, Julia Kylmala, Antti Oulasvirta. UEyes: An Eye-Tracking Dataset across User Interface Types. *In Proceedings of the 41st Annual SIGCHI Conference on Human Factors in Computing Systems* (**CHI2023 Workshop Paper**).
  - [4] Lena Hegemann, **Yue Jiang**, Joon-Gi Shin, Yi-Chi Liao, Markku Laine, Antti Oulasvirta. Computational Assistance for User Interface Design: Smarter Generation and Evaluation of Design Ideas. *In Proceedings of the 41st Annual SIGCHI Conference on Human Factors in Computing Systems* (CHI2023 Interactivity).
- [3] 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 40th Annual SIGCHI Conference on Human Factors in Computing Systems (CHI2022 Extended Abstract).
- [2] **Yue Jiang**, Vikas Garg, Antti Oulasvirta. Designer-in-the-Loop Layout Autocompletion with Graph Neural Networks. *Finnish Center for Artificial Intelligence AI Day Extended Abstract, 2022*
- [1] Yue Jiang. DocShop: Bringing Document Content to Life. Adobe Research Project Expo, 2020

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

#### Organized Workshops

- [4] **Yue Jiang\***, Yuwen Lu\*, Tiffany Knearem, Clara E Kliman-Silver, Christof Lutteroth, Toby Jia-Jun Li, Jeffrey Nichols, Wolfgang Stuerzlinger. Computational Methodologies for Understanding, Automating, and Evaluating User Interfaces. (*CHI2024*).
- [3] **Yue Jiang**, Yuwen Lu, Christof Lutteroth, Toby Jia-Jun Li, Jeffrey Nichols, Wolfgang Stuerzlinger. The Future of Computational Approaches for Understanding and Adapting User Interfaces. (*CHI2023*).
- [2] Yao Wang, Ludwig Sidenmark, Teresa Hirzle, **Yue Jiang**, Andreas Bulling. 8th International Workshop on Pervasive Eye Tracking and Mobile Eye-based Interaction (PETMEI). (*ETRA2023*).
- [1] **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. (*CHI2022*).

#### Academic Service (Program Committee / Session Chair)

- 2025 Associate Chair (AC), Full Paper, CHI2025
- 2025 **Program Committee Member**, Full Paper, IUI2025
- 2024 Accessibility Co-Chair, CHI2024
- 2024 Associate Chair (AC), CHI2024 Late-Breaking Work (SIGCHI Short Paper)
- 2024 Committee Member, ASSETS 2024 Experience Reports
- 2024 Session Chair, Gaze Interaction in Immersive Environments, CHI2024
- 2024 Session Chair, AI and UI Design, CHI2024
- 2024 HCI Master Program Admission Committee Member, Aalto Univerity, Finland
- 2024 **Ph.D. Admission Committee Member**, Finnish AI Center, Finland
- 2023 Accessibility Co-Chair, CHI2023
- 2023 **Program Committee Member**, AI and HCI Workshop, ICML2023
- 2023 Workshop Juror, CHI2023 Workshop
- 2023 Associate Chair (AC), CHI2023 Late-Breaking Work (SIGCHI Short Paper)
- 2023 Session Chair, Human AI Collaboration, CHI2023
- 2023 Session Chair, Text Input and Textual Communication, CHI2023
- 2023 **Program Committee Member**, IUI2023
- 2023 Co-Organizer & Poster Chair, HelsinCHI Symposium 2023
- 2023 Organizing Committee Member & Keynote Chair, ELLIS Doctoral Symposium 2023
- 2023 Now Member ACM AccessSIGCHI
  - 2023 **Ph.D. Admission Committee Member**, Finnish AI Center, Finland
  - 2022 Associate Chair (AC), CHI2022 Late Breaking Work (SIGCHI Short Paper)
  - 2022 Co-Host, ACM SIGCHI Conference on Designing Interactive Systems (DIS2022) Ask-Me-Anything
  - 2021 **Session Chair**, Interaction and Touch Session, MobileHCI
- 2021 2023 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 IUI2021 Demos and Posters
  - 2021 Associate Chair (AC), CHI2021 Late-Breaking Work (SIGCHI Short Paper)
  - 2020 Ph.D. & Master Admission Committee Member, University of Maryland, College Park, USA

2020	Associate Chair (AC), CH12020 Late-Breaking Work (SIGCH1 Short Paper)
2019	Ph.D. & Master Admission Committee Member, University of Maryland, College Park, USA
Nov 2019	Graduate Mentor for Technica Research Bootcamp, USA
March 2019	Ph.D Student Panel Leader for Prospective Students, University of Maryland, USA
Nov 2018	Graduate Mentor for Technica Research Bootcamp, USA
2016	Department of Mathematics Ambassador, University of Toronto, Canada
	Academic Reviews and Awards (Reviewed 138 submissions)
2024	Special Recognitions for Outstanding Reviews for CHI2024
2022	Special Recognitions for Outstanding Reviews for UIST2022
2021	Special Recognitions for Outstanding Reviews for CHI2021
2020 - 2025	SIGCHI Conference on Human Factors in Computing Systems (CHI)
2019 - 2024	SIGCHI Late Breaking Work (CHI LBW)
	ACM User Interface Software and Technology Symposium (UIST)
	ACM Transactions on Computer-Human Interaction (TOCHI)
	SIGCHI Workshop paper
2023	SIGCHI Workshop proposal
2023	ICML Workshop paper
2022	ACM SIGGRAPH
2022	ACM SIGGRAPH Asia
2022	International Symposium on Mixed and Augmented Reality (ISMAR)
2022	ACM Multimedia (MM)
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	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)
	Grants and Honors
2023	Meta Research PhD Fellowship
2022	Google Europe Students with Disabilities Scholarship
2024	Heidelberg Laureate Forum Young Researcher
2024	Nokia Scholarship
2024	UCSD Data Science Rising Star
2021 - 2024	Special Recognitions for Outstanding Reviews x 3 (CHI2021, UIST2022, CHI2024)
2024	Finnish Center for Artificial Intelligence (FCAI) Travel Grant (22,000 Euros)
2022 - 2025	Finnish Center for Artificial Intelligence (FCAI) PhD Grants
2022	Best Paper Honorable Mention, CHI2022
2022	ACM SIGCHI Gary Marsden Travel Award (In-person)
2021	ACM SIGCHI Gary Marsden Travel Award (Virtual)
2020	Oral Paper Top 5%, CVPR2020

Sept. 2020	Adobe Research Gift Grant for Document Intelligent Research (2020 Fall) (\$10,000)
May 2020	Adobe Research Gift Grant for Document Intelligent Research (2020 Summer) (\$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 x 4, University of Toronto
2014 - 2016	New College Council In-Course Scholarship x 2, 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
	Professional Experience and Internships
Jan 2024	Visiting PhD Student
- May 2024	Carnegie Mellon University, USA
	Supervisor: Prof. Jeffery Bigham
June 2023	Research Intern
- Sept 2023	Apple Inc., USA
•	Supervisor: Dr. Jeffery Nichols
Oct 2020	Research Candidate
- 2021	Max Planck Institute for Informatics (MPII), Germany
	Supervisor: Prof. Christian Theobalt
•	Research Intern
– Aug 2020	Carnegie Mellon University, Pennsylvania, USA Supervisor: Prof. Chris Harrison
Mar 2020	Research Intern
- Aug 2020	Adobe Research, College Park, Maryland, USA
	Supervisor: Dr. Vlad Morariu
June 2019	Visiting Research Student
•	Shenzhen University, Shenzhen, China
-	Supervisor: Prof. Hui Huang & Prof. Daniel Cohen-Or
May 2017	Software Engineer
•	Intel Corporation, San Jose, California, USA
-	Research Assistant
- Apr 2017	University of Toronto, Toronto, Canada
141 2017	Supervisor: Prof. Gerald Penn
	Teaching Experience
Oct 2024	Guest Lecturer - Topic: Visual Saliency, Computational Design and Interaction
	Aalto University
	Instructor: Prof. Antti Oulasvirta
May 2023	Guest Lecturer - Topic: Visual Perception, Human Factors Engineering
	Aalto University

	Instructor: Prof. Antti Oulasvirta
Jan 2023	Research Project Mentor - Research Project Course in Human-Computer Interaction
- May 2023	Aalto University
	Instructor: Prof. Antti Oulasvirta
Nov 2022	Guest Lecturer - Topic: Visual Saliency, Computational Design and Interaction
	Aalto University
	Instructor: Prof. Antti Oulasvirta
	Co-Instructor - Seminar: Computing the User and their interface
- Feb 2022	Saarland University
	Instructors: Prof. Anna Maria Feit, Yue Jiang, Kevin Baum, Markus Langer
-	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
•	Teaching Assistant - CMSC740 Advanced Computer Graphics
– May 2020	Department of Computer Science, University of Maryland
	Instructor: Prof. Matthias Zwicker
-	Teaching Assistant - CMSC427 Computer Graphics
- Dec 2019	Department of Computer Science, University of Maryland
	Instructor: Prof. Matthias Zwicker
-	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. Francois 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
- Apr 2016	Department of Mathematics, University of Toronto
Sept 2015	Peer Tutor - MAT137 Calculus
- Apr 2016	Department of Mathematics, University of Toronto
2014	Teaching Volunteer - High School Mathematics and Physics
	Qinyuan, Shanxi Province, China
	Mentoring Experience
	Students Mentored:
2024	
	Topic: Visual Saliency Informed Controlled Synthesis of User Interfaces

2024 Amanda Li (Master's student, CMU)

	Ananya Dutta (Undergraduate student, Manipal University Jaipur)
	Topic: Scanpath-based UI Optimization
2023	Busra Asan (Master's student, Istanbul Technical University)
	Topic: Color Optimization for UIs
2023	Changkong Zhou (Master's student, Aalto University)
	Topic: UI Autocompletion
2023	Henrik Kauppi (Master's student, Aalto University)
	Topic: Scanpath Dataset for UI Transitions
2023	Lotta Merisaari (Master's student, Aalto University)
	Topic: Scanpath Dataset for UI Transitions
2023	Yao Zhang (Master's student, Aalto University)
	Topic: UI Embedding
2023	Elham Sadri (Master's student, Simon Fraser University)
	Topic: Design and Evaluation of a New Editor for Responsive Graphical User Interfaces
2021	Kartik Teotia (Master's student, Max Planck Institute) [Seminar Supervisor]
	Topic: NeRF and Signed Distance Field (SDF)
2020	Duotun Wang (Master's student, University of Maryland)
	Topic: Signed Distance Field-Based Differentiable Sketching
2018, 2019	Graduate Mentor for Technica (All-Women Hackathon)
2018 - 2020	Graduate Mentor at Maryland Center For Women In Computing (MCWIC) Peer mentoring
	Talks
Oat 2024	
Oct 2024	Toward Computational User Interfaces, University of Waterloo, Canada (Hosted by Dan Vogel)
Aug 2024	-
Aug 2024	Revolutionizing UI Design: Computational Representations and AI Assistance, University
Aug 2024	Revolutionizing UI Design: Computational Representations and AI Assistance, University of Illinois Urbana-Champaign, USA (Hosted by Yun Huang)  Computational UI Representation, Stanford University, USA (Hosted by Yujie Tao)
Aug 2024 May 2024	Revolutionizing UI Design: Computational Representations and AI Assistance, University of Illinois Urbana-Champaign, USA (Hosted by Yun Huang)  Computational UI Representation, Stanford University, USA (Hosted by Yujie Tao)  Understanding UIs and How People Interact with Them, Massachusetts Institute of Technol-
Aug 2024 May 2024 Apr 2024 Apr 2024	Revolutionizing UI Design: Computational Representations and AI Assistance, University of Illinois Urbana-Champaign, USA (Hosted by Yun Huang)  Computational UI Representation, Stanford University, USA (Hosted by Yujie Tao)  Understanding UIs and How People Interact with Them, Massachusetts Institute of Technology, USA (Hosted by Stefanie Mueller)  Understanding UIs and How People Interact with Them, University of Rochester, USA (Hosted
Aug 2024 May 2024 Apr 2024 Apr 2024	Revolutionizing UI Design: Computational Representations and AI Assistance, University of Illinois Urbana-Champaign, USA (Hosted by Yun Huang)  Computational UI Representation, Stanford University, USA (Hosted by Yujie Tao)  Understanding UIs and How People Interact with Them, Massachusetts Institute of Technology, USA (Hosted by Stefanie Mueller)  Understanding UIs and How People Interact with Them, University of Rochester, USA (Hosted by Yukang Yan)  Understanding UIs and How People Interact with Them, Northeastern University, USA
Aug 2024 May 2024 Apr 2024 Apr 2024 Apr 2024	Revolutionizing UI Design: Computational Representations and AI Assistance, University of Illinois Urbana-Champaign, USA (Hosted by Yun Huang)  Computational UI Representation, Stanford University, USA (Hosted by Yujie Tao)  Understanding UIs and How People Interact with Them, Massachusetts Institute of Technology, USA (Hosted by Stefanie Mueller)  Understanding UIs and How People Interact with Them, University of Rochester, USA (Hosted by Yukang Yan)  Understanding UIs and How People Interact with Them, Northeastern University, USA (Hosted by Dakuo Wang)
Aug 2024 May 2024 Apr 2024 Apr 2024 Apr 2024 June 28, 2023	Revolutionizing UI Design: Computational Representations and AI Assistance, University of Illinois Urbana-Champaign, USA (Hosted by Yun Huang)  Computational UI Representation, Stanford University, USA (Hosted by Yujie Tao)  Understanding UIs and How People Interact with Them, Massachusetts Institute of Technology, USA (Hosted by Stefanie Mueller)  Understanding UIs and How People Interact with Them, University of Rochester, USA (Hosted by Yukang Yan)  Understanding UIs and How People Interact with Them, Northeastern University, USA (Hosted by Dakuo Wang)  Computational Approaches for UI Understanding, Google, USA (Hosted by Tiffany Knearem)  UEyes: Understanding Visual Saliency across User Interface Types, HelsinCHI Symposium,
Aug 2024  May 2024  Apr 2024  Apr 2024  Apr 2024  June 28, 2023  Apr 13, 2023	Revolutionizing UI Design: Computational Representations and AI Assistance, University of Illinois Urbana-Champaign, USA (Hosted by Yun Huang)  Computational UI Representation, Stanford University, USA (Hosted by Yujie Tao)  Understanding UIs and How People Interact with Them, Massachusetts Institute of Technology, USA (Hosted by Stefanie Mueller)  Understanding UIs and How People Interact with Them, University of Rochester, USA (Hosted by Yukang Yan)  Understanding UIs and How People Interact with Them, Northeastern University, USA (Hosted by Dakuo Wang)  Computational Approaches for UI Understanding, Google, USA (Hosted by Tiffany Knearem)  UEyes: Understanding Visual Saliency across User Interface Types, HelsinCHI Symposium, Finland (Hosted by Antti Oulasvirta)  Demo: Computational Assistance for User Interface Design: Smarter Generation and Eval-
Aug 2024  May 2024  Apr 2024  Apr 2024  Apr 2024  June 28, 2023  Apr 13, 2023  Apr 13, 2023	Revolutionizing UI Design: Computational Representations and AI Assistance, University of Illinois Urbana-Champaign, USA (Hosted by Yun Huang)  Computational UI Representation, Stanford University, USA (Hosted by Yujie Tao)  Understanding UIs and How People Interact with Them, Massachusetts Institute of Technology, USA (Hosted by Stefanie Mueller)  Understanding UIs and How People Interact with Them, University of Rochester, USA (Hosted by Yukang Yan)  Understanding UIs and How People Interact with Them, Northeastern University, USA (Hosted by Dakuo Wang)  Computational Approaches for UI Understanding, Google, USA (Hosted by Tiffany Knearem)  UEyes: Understanding Visual Saliency across User Interface Types, HelsinCHI Symposium, Finland (Hosted by Antti Oulasvirta)  Demo: Computational Assistance for User Interface Design: Smarter Generation and Evaluation of Design Ideas, HelsinCHI Symposium, Finland (Hosted by Antti Oulasvirta)  Computational Approaches for User Interfaces, City University of Hong Kong, China (Hosted
Aug 2024  May 2024  Apr 2024  Apr 2024  Apr 2024  June 28, 2023  Apr 13, 2023  Apr 13, 2023  Apr 12, 2023	Revolutionizing UI Design: Computational Representations and AI Assistance, University of Illinois Urbana-Champaign, USA (Hosted by Yun Huang)  Computational UI Representation, Stanford University, USA (Hosted by Yujie Tao)  Understanding UIs and How People Interact with Them, Massachusetts Institute of Technology, USA (Hosted by Stefanie Mueller)  Understanding UIs and How People Interact with Them, University of Rochester, USA (Hosted by Yukang Yan)  Understanding UIs and How People Interact with Them, Northeastern University, USA (Hosted by Dakuo Wang)  Computational Approaches for UI Understanding, Google, USA (Hosted by Tiffany Knearem)  UEyes: Understanding Visual Saliency across User Interface Types, HelsinCHI Symposium, Finland (Hosted by Antti Oulasvirta)  Demo: Computational Assistance for User Interface Design: Smarter Generation and Evaluation of Design Ideas, HelsinCHI Symposium, Finland (Hosted by Antti Oulasvirta)  Computational Approaches for User Interfaces, City University of Hong Kong, China (Hosted by Zhicong Lu)  UEyes: Understanding Visual Saliency across User Interface Types, CHI Lux Seminar, Luxembourg (Hosted by Luis Leiva)

Topic: Image Editing

2024 Elise Chenxinran Shen (Master's student, University of British Columbia)

Topic: Simulating Human Behaviors on Social Media

- Apr 8, 2022 **Adaptive User Interfaces**, Hasso Plattner Institute, Germany (Hosted by Ran Zhang & Patrick Paudisch)
- Mar 17, 2022 Adaptive User Interfaces, University of Luxembourg, Luxembourg (Hosted by Luis Leiva)
- Dec 7, 2021 **Adaptive User Interfaces and 3D Reconstruction**, ETH Zurich, Switzerland (Hosted by Christian Holz & 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)
- 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 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

#### 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

- May 2022 Student Volunteer for the SIGCHI Conference on Human Factors in Computing Systems (CHI2022), New Orleans, USA.
- Oct 2021 Student Volunteer for the ACM Symposium on User Interface Software and Technology **(UIST2021)** (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

#### References

**Prof. Antti Oulasvirta** – Professor, Aalto University, Finland

**Prof. Jeffrey Bigham** - Associate Professor, Carnegie Mellon University, USA

**Prof. Wolfgang Stuerzlinger** – Professor, Simon Fraser University, Canada

**Prof. Christof Lutteroth** – Associate Professor, University of Bath, UK

**Dr. Jeffrey Nichols** – Research Scientist, Apple, USA