

Rahul Arora

CONTACT INFORMATION DGP Lab, Bahen Centre for IT
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RESEARCH INTERESTS Interactive Computer Graphics
Human-Computer Interaction
Virtual and Augmented Realities

EDUCATION *PhD, University of Toronto* 2015-Present
Major: Computer Science
CGPA: 4.0/4.0

MTech, Indian Institute of Technology, Kanpur 2014-2015
Major: Computer Science and Engineering
CGPA: 9.6/10.0

BTech, Indian Institute of Technology, Kanpur 2010-2015
Major: Computer Science and Engineering
CGPA: 8.5/10.0

PUBLICATIONS **MagicalHands: Mid-Air Hand Gestures for Animating in VR**
Rahul Arora, Rubaiat Habib Kazi, Danny Kaufman, Wilmot Li, and Karan Singh
ACM Symposium on User Interface Software and Technology 2019 (UIST '19)

Volumetric Michell Trusses for Parametric Design & Fabrication
Rahul Arora, Alec Jacobson, Timothy R. Langlois, Yijiang Huang, Caitlin Mueller, Wojciech Matusik, Ariel Shamir, Karan Singh, and David I.W. Levin
ACM Symposium on Computational Fabrication 2019 (SCF '19)

Designing Volumetric Truss Structures for Computational Fabrication
Rahul Arora, Alec Jacobson, Timothy R. Langlois, Karan Singh, and David I.W. Levin
Graphics Interface 2018 Posters (GI '18)

SymbiosisSketch: Combining 2D and 3D Sketching for Designing Detailed 3D Objects in Situ
Rahul Arora, Rubaiat Habib Kazi, Tovi Grossman, George Fitzmaurice, and Karan Singh
ACM SIGCHI Conference on Human Factors in Computing Systems 2018 (CHI '18)

Experimental Evaluation of Sketching on Surfaces in VR
Rahul Arora, Rubaiat Habib Kazi, Fraser Anderson, Tovi Grossman, Karan Singh, and George Fitzmaurice
ACM SIGCHI Conference on Human Factors in Computing Systems 2017 (CHI '17)

SketchSoup: Exploratory Ideation using Design Sketching
Rahul Arora, Ishan Darolia, Vinay P. Namboodiri, Karan Singh, and Adrien Bousseau
Computer Graphics Forum (CGF) 2017, presented at Eurographics 2017

Derandomizing Isolation Lemma for $K_{3,3}$ -free and K_5 -free Bipartite Graphs
Rahul Arora, Ashu Gupta, Rohit Gurjar, and Raghunath Tewari
Symposium on Theoretical Aspects of Computer Science (STACS) 2016

TEACHING EXPERIENCE	Computer Graphics , University of Toronto Teaching Assistant for Prof. Karan Singh and Prof. David Levin	Winter 2018
	Computer Graphics , University of Toronto Teaching Assistant for Prof. Karan Singh and Prof. Alec Jacobson	Fall 2017
	Intro to Theory of Computation , University of Toronto Teaching Assistant for Prof. Azadeh Farzan	Fall 2015
	Introduction to Computer Graphics , IIT Kanpur Teaching Assistant for Prof. Vinay P. Namboodiri	Fall 2014
SELECTED INTERNSHIPS	Adobe Research, Seattle, USA <i>Mentored by Dr. Rubaiat Habib, Dr. Danny Kaufman, and Dr. Wil Li</i> Studied gestural methods for authoring animations in VR.	Summer 2018
	Autodesk Research, Toronto, Canada <i>Mentored by Dr. Tovi Grossman and Dr. Rubaiat Habib</i> Developed a prototype augmented reality tool for concept sketching in 3D.	Winter 2017
	Autodesk Research, Toronto, Canada <i>Mentored by Dr. Tovi Grossman and Dr. Rubaiat Habib</i> Conducted controlled experiments to understand 3D sketching ability.	Summer 2016
	Adobe Research, Bangalore, India <i>Mentored by Ramesh Srinivasaraghavan</i> Built a gamified crowdsourcing platform for object recognition tasks.	Summer 2013
AWARDS AND RECOGNITION	Adobe Research Fellowship 2019 (US \$10,000)	2018
	Adobe Research Fellowship 2018 finalist	2017
	Mitacs Accelerate Award for industrial partnership (CA \$15,000)	2016
	Merit-cum-Means Scholarship, IIT Kanpur	2010–2014
	Academic Excellence Award, IIT Kanpur (top 5% students)	2013
REVIEWING EXPERIENCE	Human Factors in Computing Systems (CHI)	2017–2019
	User Interface Software and Technology (UIST)	2018–2019
	Transactions on Visualization and Computer Graphics (IEEE TVCG)	2019
	Virtual Reality (IEEE VR)	2018
	Designing Interactive Systems (DIS)	2018
	Spatial User Interfaces (SUI)	2018
	Graphics Interface (GI)	2018
	Computer Graphics and Applications (IEEE CG&A)	2017