

# MOHIT JAIN

Principal Researcher, Microsoft Research India

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## PROFESSIONAL EXPERIENCE

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### INDUSTRY EXPERIENCE

- 2019-Present Microsoft Research, India  
Principal Researcher, Technology and Empowerment (TEM)
- 2012-2019 IBM Research, India  
Senior Research Engineer, Cognitive IoT
- 2011-2012 Amazon, USA  
Software Development Engineer, Digital Videogames

### ACADEMIC EXPERIENCE

- 2015-2019 University of Washington, USA  
Graduate Research Assistant, UbiComp Lab
- 2009-2011 University of Toronto, Canada  
Graduate Research Assistant, Digital Graphics Project Lab

### INTERNSHIP EXPERIENCE

- Summer 2011 HP Labs, India  
Research Intern, Mobile and Immersive Experience Lab  
*Advisor:* Dr. Sriganesh Madhvanath
- Spring 2011 Microsoft Research, India  
Research Intern, Technology for Emerging Markets (TEM) team  
*Advisor:* Dr. Indrani Medhi, Aishwarya Ratan, Dr. Edward Cutrell
- Summer 2010 Microsoft Research, India  
Visiting Researcher, Technology for Emerging Markets (TEM) team  
*Advisor:* Dr. Edward Cutrell
- Fall 2009 Greenbelt Foundation, Canada  
Interface Designer
- Summer 2007 University of California, Berkeley and Microsoft Research, India  
Software Developer Intern, Technology for Emerging Markets (TEM) team  
*Advisor:* Dr. Joyojeet Pal, Udai Pawar, Sukumar Anikar, Dr. Kentaro Toyama

## EDUCATION

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- 2015-2019 Ph.D., Computer Science & Engineering, University of Washington, USA  
*GPA:* 3.94/4.0  
*Advisor:* Dr. Shwetak Patel (*Area:* Ubiquitous Computing)  
*Thesis:* Making Chatbots More Transparent and Applicable to New Demographics
- 2009-2011 Master of Science, Computer Science, University of Toronto, Canada  
*GPA:* 4.0/4.0  
*Advisor:* Dr. Ravin Balakrishnan (*Area:* Human-Computer Interaction)  
*Thesis:* User Learning and Performance with Bezel Menus

2005-2009 Bachelor of Technology, Information & Communication Technology, Dhirubhai Ambani Institute of ICT (DA-IICT), India  
GPA: 9.61/10 (**Bronze Medalist**)

## HONORS, AWARDS & GRANTS

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- 2023 **Accessibility Award** at Springer INTERACT 2023 for the Employed DHH study [C44].
- 2022 **Best Subject Paper** at AIOC 2022 for SmartKC [C38, J5].  
**Best Paper of Session** at AIOC 2022 for SmartKC [C38, J5].  
Third place in Hack for Society (Executive Challenge) and third place in Hack 2 Enable (Special Topic Challenge) at **Microsoft Hackathon** for the project: 'Planting the SEEDS: Scalable Educational Experiences with Digital Scaffolding'.
- 2021 **Honorable Mention Award** (Top 5%) at ACM CSCW for Infrastructuring Telehealth [J3].  
**Methods Recognition Award** at ACM CSCW for Turn2Earn [J4].  
**Honorable Mention Award** at Microsoft Global Hackathon for WhatsInMyReport project in the Hack Health category.  
Project VICT – Computational Thinking for Persons with Visual Impairment [C31, C32, C35] won **The Jury Commendation Certificate** in the 19th FICCI Corporate Social Responsibility Award.
- 2019 IBM Fourth Patent Plateau.
- 2018 IBM **Outstanding Equity Award** (awarded to <0.1% of IBMers).  
**Honorable Mention Award** (Top 5%) at ACM CHI for Seismo [C22].  
**Aegis Graham Bell Award** (Category: Innovation in IoT) for my team's work in Agribusiness.  
IBM 'A-level Accomplishment' Award (Category: Customer Offering) for Utility Innovations to Embrace Sustainability and Climate Change.  
IBM Third Patent Plateau.
- 2017 Winner of **DFS Tech Chatbots Challenge** 2017, award of US\$20,000 [J2].  
Young Researcher attendee at the **Heidelberg Laureate Forum**.  
IBM 'A Level Accomplishment' Award for Efficient Integration of non-conventional Energy Sources in Electric and Thermal Grids [C18].  
IBM Volunteer Award for being part of the IBM Research India Internship team.  
IBM Second Patent Plateau.
- 2016 IBM '**Outstanding Technical Achievement Award**' for UrJar [C11, W7].  
IBM '**Outstanding Technical Achievement Award**' for contributions to User Centric Demand Management [W6, C12, C14].  
IBM First Patent Plateau.
- 2015 IBM '**O Level Accomplishment**' Award (Category: Customer Offering) for Smarter Energy Offering.  
IBM '**Research Division Award**' for Energy Efficiency in Brunei [C12].  
IBM 'A Level Accomplishment' Award (Category: Image) for UrJar [C11, W7].  
IBM 'A Level Accomplishment' Award (Category: Science) for User-Centric Demand Management [W6, C12, C14].  
IBM 'A Level Accomplishment' Award (Category: Accelerated Market Introduction) for Analytics and Applications for Energy and Utility.  
Runner-up at Smarter Energy Research Institute (SERI) conference organized by IBM.  
University of Washington graduate scholarship.
- 2014 **Best Paper Award** at BuildSys for Collaborative Energy Conservation [C12].  
**Runner-up Best Presentation Award** at BuildSys for Collaborative Energy Conservation [C12].  
IBM 'A Level Accomplishment' Award (Category: Client Success) for Efficient Energy Generation and Consumption in Brunei [C12].

- IBM 'A Level Accomplishment' Award (Category: Science) for Technology for Education (IDEAL) Project [C10].
- 2009 **Wolfond Fellowship**.  
 Won MultiPoint Education Award in **Microsoft Imagine Cup** World Finals, Egypt.  
 Second runner-up in Microsoft Imagine Cup National Finals (Software Design), India.  
**Travel scholarship** to attend ACM/IEEE ICTD conference.  
 University of Toronto graduate scholarship (2009-2011).  
 Bronze medal for securing 3<sup>rd</sup> rank in a class of 240 students at DA-IICT.
- 2008 Won TechMarket, a white paper presentation competition, at DA-IICT.
- 2007 Won **IBM INVITE**, a software design competition.

## PEER-REVIEWED JOURNAL PUBLICATIONS

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- 2023 J8 *"Is it even giving the correct reading or not?": How Trust and Relationships Mediate Blood Pressure Management in India.*  
 Nimisha Karnatak, Brooke Loughrin, Tiffany Amy Kuo, Odeline Mateu-Silvernail, Indrani Medhi Thies, William Thies, **Mohit Jain**.  
 TOCHI (*ACM Transactions on Computer-Human Interaction*) 30, 6 article 90.
- J7 *Understanding the Technology-Mediated Home Phlebotomy Ecosystem in India*  
 Meghna Gupta\*, Nimisha Karnatak\*, **Mohit Jain**. [\* equal contributors]  
 CSCW (*PACM HCI*).
- 2022 J6 *Towards Automating Retinoscopy for Refractive Error Diagnosis.*  
 Aditya Aggarwal, Siddhartha Gairola, Uddeshya Upadhyay, Akshay P. Vasishta, Diwakar Rao, Aditya Goyal, Kaushik Murali, Nipun Kwatra, **Mohit Jain**.  
 IMWUT (*PACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*) 6, 3 article 97.
- 2021 J5 *SmartKC: Smartphone-based Corneal Topographer for Keratoconus Detection.*  
 Siddhartha Gairola, Murtuza Bohra, Nadeem Shaheer, Navya Jayaprakash, Pallavi Joshi, Anand Balasubramaniam, Kaushik Murali, Nipun Kwatra, **Mohit Jain**.  
 IMWUT (*PACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*) 5, 4, article 155.
- J4 *Understanding Driver-Passenger Interactions in Vehicular Crowdsensing.*  
 Dhruv Agarwal, Srishti Agarwal, Vidur Singh, Rohita Kochupillai, Rosemary Pierce-Messick, Srinivasan Iyengar, **Mohit Jain**.  
 CSCW (*PACM HCI*) 5, 2 article 482.  
**Methods Recognition Award**
- J3 *Infrastructuring Telehealth in (In)Formal Patient-Doctor Contexts.*  
 Karthik S. Bhat, **Mohit Jain**, Neha Kumar.  
 CSCW (*PACM HCI*) 5, 2, article 323.  
**Honorable Mention Award (Top 5%)**
- 2019 J2 *FarmChat: A Conversational Agent to Answer Farmer Queries.*  
**Mohit Jain**, Pratyush Kumar, Ishita Bhansali, Q. Vera Liao, Khai Truong, Shwetak Patel.  
 IMWUT (*PACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*) 2, 4, article 170.
- 2017 J1 *DigiTouch: Reconfigurable Thumb-to-Finger Interaction for Input and Text Entry for Head-mounted Displays.*  
 Eric Whitmire, **Mohit Jain**, Divye Jain, Greg Nelson, Ravi Karkar, Shwetak Patel, Mayank Goel.  
 IMWUT (*PACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*) 1, 3, article 113.

## PEER-REVIEWED CONFERENCE PUBLICATIONS

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- 2023 C45 *Jod: Examining the Design and Implementation of a Videoconferencing Platform for Mixed Hearing Groups.*  
Anant Mittal, Meghna Gupta, Roshni Poddar, Tarini Naik, SeethaLakshmi Kuppuraj, James Fogarty, Pratyush Kumar, **Mohit Jain**.  
ASSETS (*ACM SIGACCESS Conference on Computers and Accessibility*).
- C44 *Challenges faced by the Employed Indian DHH Community.*  
 Advaith Sridhar, Roshni Poddar, **Mohit Jain**, Pratyush Kumar.  
INTERACT (*Springer IFIP TC13 International Conference on Human-Computer Interaction*).  
**Accessibility Award**
- C43 *Towards Intermediated Workflows for Hybrid Telemedicine.*  
Karthik S. Bhat, Neha Kumar, Karthik Shamanna, Nipun Kwatra, **Mohit Jain**.  
CHI (*ACM Conference on Human Factors in Computing Systems*).
- C42 *Constraints and Workarounds to Support Clinical Consultations in Synchronous Text-based Platforms.*  
Brenna Li, Tetyana Skoropad, Puneet Seth, **Mohit Jain**, Khai Truong, Alex Mariakakis.  
CHI (*ACM Conference on Human Factors in Computing Systems*).
- C41 *Understanding Journalists' Workflows in News Curation.*  
Shubham Atreja, Shruthi Srinath, **Mohit Jain**, Joyojeet Pal.  
CHI (*ACM Conference on Human Factors in Computing Systems*).
- 2022 C40 *From the Margins to the Centre: Defining New Mission and Vision for HCI Research in South Asia.*  
Pranjal Jain, Samia Ibtasam, Sumita Sharma, Nilavra Bhattacharya, Anupriya Tuli, Dilrukshi Gamage, Dhruv Jain, Rucha Tulaskar, Priyank Chandra, Lubna Razaq, Rahat Jahangir Rony, Deepak Ranjan Padhi, **Mohit Jain**, Suleman Shahid, Nova Ahmed, Devanuj Kanta Balkrishan, Pushpendra Singh.  
CHI EA (*Extended Abstracts of the ACM CHI Conference on Human Factors in Computing Systems*).
- C39 *Keratoconus Classifier for Smartphone-based Corneal Topographer.*  
Siddhartha Gairola, Pallavi Joshi, Anand Balasubramaniam, Kaushik Murali, Nipun Kwatra, **Mohit Jain**.  
EMBC (*IEEE International Engineering in Medicine and Biology Conference*).
- C38 *Learning Curve in the Construct of Smartphone-based Keratoscope Prototype for KCN Screening.*  
Pallavi Joshi, Anand Balasubramaniam, Kaushik Murali, Siddhartha Gairola. (*Note: A paper can have up to 4 authors in total*).  
AIOC (*Annual Conference of All India Ophthalmological Society*).
- C37 *Language Patterns and Behaviour of the Peer Supporters in Multilingual Healthcare Conversational Forums.*  
Ishani Mondal, Kalika Bali, **Mohit Jain**, Monojit Choudhury, Jacki O'Neill, Millicent Ochieng, Kagnoya Awori, Keshet Ronen.  
LREC (*ELRA Language Resources and Evaluation Conference*).
- C36 *Global Readiness of Language Technology for Healthcare: What Would It Take to Combat the Next Pandemic?*  
Ishani Mondal, Kabir Ahuja, **Mohit Jain**, Jacki O'Neill, Kalika Bali, Monojit Choudhury.  
COLING (*International Conference on Computational Linguistics*).
- 2021 C35 *VStroll: An Audio-based Virtual Exploration to Encourage Walking among People with Vision Impairments.*  
Gesu India, **Mohit Jain**, Pallav Karya, Nirmalendu Diwakar, Manohar Swaminathan.  
ASSETS (*ACM SIGACCESS Conference on Computers and Accessibility*).
- C34 *Understanding Motivations and Barriers to Exercise Among People with Blindness in India.*  
Gesu India, **Mohit Jain**, Manohar Swaminathan.  
INTERACT (*Springer IFIP TC13 International Conference on Human-Computer Interaction*).

- C33 *A Linguistic Annotation Framework to Study Interactions in Multilingual Healthcare Conversational Forums.*  
Ishani Mondal, Kalika Bali, **Mohit Jain**, Monojit Choudhury, Ashish Sharma, Evans Gitau, Jacki O' Neill, Kagonya Awori, Sarah Gitau.  
LAW, EMNLP (*Linguistic Annotation Workshop at Empirical Methods in Natural Language Processing*).
- C32 *Smartphone Usage by Expert Blind Users.*  
**Mohit Jain**, Nirmalendu Diwakar, Manohar Swaminathan.  
CHI (*ACM Conference on Human Factors in Computing Systems*).
- C31 *Teachers' Perceptions around Digital Games for Children in Low-resource Schools for the Blind.*  
Gesu India, Vidhya Y, Aishwarya O, Nirmalendu Diwakar, **Mohit Jain**, Aditya Vashistha, Manohar Swaminathan.  
CHI (*ACM Conference on Human Factors in Computing Systems*).
- C30 *RespireNet: A Deep Neural Network for Accurately Detecting Abnormal Lung Sounds in Limited Data Setting.*  
Siddhartha Gairola, Francis Tom, Nipun Kwatra, **Mohit Jain**.  
EMBC (*IEEE International Engineering in Medicine and Biology Conference*).
- C29 *Height Estimation of Children under Five Years Using Depth Images.*  
Anusua Trivedi, **Mohit Jain**, Nikhil Kumar Gupta, Markus Hinsche, Prashant Singh, Markus Matiaschek, Tristan Behrens, Mirco Militeri, Cameron Birge, Shivangi Kaushik, Archisman Mohapatra, Rita Chatterjee, Rahul Dodhia, Juan Lavista Ferres  
EMBC (*IEEE International Engineering in Medicine and Biology Conference*).
- 2020 C28 *Gaze-based Screening of Autistic Traits for Adolescents and Young Adults using Prosaic Videos.*  
Karan Ahuja, Abhishek Bose, **Mohit Jain**, Kuntal Dey, Anil Joshi, Krishnaveni Achary, Blessin Varkey, Chris Harrison, Mayank Goel.  
COMPASS (*ACM SIGCAS Conference on Computing and Sustainable Societies*).
- 2019 C27 *Automatic Generation and Evaluation of Usable and Secure Audio reCAPTCHA.*  
**Mohit Jain**, Rohun Tripathi, Ishita Bhansali, Pratyush Kumar.  
ASSETS (*ACM SIGACCESS International Conference on Computers and Accessibility*).
- C26 *Adversarial Adaptation of Scene Graph Models for Understanding Civic Issues.*  
Shanu Kumar, Shubham Atreja, Anjali Singh, **Mohit Jain**.  
WWW (*International World Wide Web Conference*).
- C25 *Resilient Chatbots: Repair Strategy Preferences for Conversational Breakdowns.*  
Zahra Ashktorab\*, **Mohit Jain**\*, Q. Vera Liao\*, Justin D. Weisz. [\* equal contributors]  
CHI (*ACM Conference on Human Factors in Computing Systems*).
- C24 *BigBlueBot: Teaching Strategies for Successful Human-Agent Interactions.*  
Justin D. Weisz, **Mohit Jain**, Narendra Nath Joshi, James Johnson, Ingrid Lange.  
IUI (*ACM International Conference on Intelligent User Interfaces*).
- C23 *Automatic Generation of Leveled Visual Assessments for Young Learners.*  
Anjali Singh, Ruhi S. Mittal, Shubham Atreja, Mourvi Sharma, Seema Nagar, Prasenjit Dey, **Mohit Jain**.  
EAAI (*Educational Advances in Artificial Intelligence*).
- 2018 C22 *Seismo: Blood Pressure Monitoring using Built-in Smartphone Accelerometer and Camera.*  
 Edward Jay Wang, Junyi Zhu, **Mohit Jain**, Tien-Jui Lee, Elliot Saba, Lama Nachman, Shwetak Patel.  
CHI (*ACM Conference on Human Factors in Computing Systems*).  
**Honorable Mention Award (Top 5%)**
- C21 *Convey: Exploring the Use of a Context View for Chatbots.*  
**Mohit Jain**, Ramachandra Kota, Pratyush Kumar, Shwetak Patel.  
CHI (*ACM Conference on Human Factors in Computing Systems*).

- C20 *End-To-End Audio Replay Attack Detection Using Deep Convolutional Networks with Attention.*  
Francis Tom, **Mohit Jain**, Prasenjit Dey.  
INTERSPEECH (Annual Conference of the International Speech Communication Association).
- C19 *MobiCeil: Cost-Free Indoor Localizer for Office Buildings.*  
**Mohit Jain**, Megha Nawhal, Saicharan Duppati, Sampath Dechu.  
MobileHCI (ACM Conference on Human-Computer Interaction with Mobile Devices and Services).
- C18 *Reducing Energy Consumption for Space Heating by Changing Zone Temperature: Pilot Trial in Luleå, Sweden.*  
Kumar Saurav, **Mohit Jain**, Sambaran Bandhyopahyay.  
eEnergy (ACM International Conference on Future Energy Systems).
- C17 *Opportunistic Sensing with Mic Arrays on Smart Speakers for Distal Interaction and Exercise Tracking.*  
Anup Agarwal, **Mohit Jain**, Pratyush Kumar, Shwetak Patel.  
ICASSP (IEEE International Conference on Acoustics, Speech and Signal Processing).
- C16 *Evaluating and Informing the Design of Chatbots.*  
**Mohit Jain**, Pratyush Kumar, Ramachandra Kota, Shwetak Patel.  
DIS (ACM Conference on Designing Interactive Systems).
- 2016 C15 *Software-only Occupancy Inference in a Workplace.*  
**Mohit Jain**, Vikas Chandan, Ashok Pon Kumar, Vijay Arya, Sridhar R, Babitha Ramesh.  
ISGT NA (IEEE Conference on Innovative Smart Grid Technologies NA).
- 2015 C14 *Methodologies for Effective Demand Response Messaging.*  
**Mohit Jain**, Vikas Chandan, Marilena Minou, George Thanos, Tri K Wijaya, Achim Lindt, Arne Gylling.  
SmartGridComm (IEEE International Conference on Communications, Control, and Computing Technologies for Smart Grid).
- C13 *Comparing Energy Feedback Techniques for Dormitory Students in India.*  
**Mohit Jain**, Deepika Chhabra, Amarjeet Singh.  
BuildSys (ACM International Conference on Systems for Energy-Efficient Built Environments).
- 2014 C12 *Collaborative Energy Conservation in a Microgrid.*  
 **Mohit Jain**, Harshad Khadilkar, Neha Sengupta, Zainul Charbiwala, Kushan U Tennakoon, Rodzay bin H.A. Wahab, Liyanage C.D. Silva, Deva P. Seetharam.  
BuildSys (ACM International Conference on Systems for Energy-Efficient Built Environments).  
**Best Paper Award**  
**Runner-Up Best Presentation Award**
- C11 *UrJar: A Lighting Solution using Discarded Laptop Batteries.*  
Vikas Chandan, **Mohit Jain**, Harshad Khadilkar, Zainul Charbiwala, Anupam Jain, Sunil Ghai, Rajesh Kunnath, Deva P. Seetharam.  
DEV (ACM Symposium on Computing for Development).
- C10 *EduPaL: Enabling Blended Learning in Resource Constrained Environments.*  
Malolan Chetlur, Ashay Tamhane, Vinay Kumar Reddy, Bikram Sengupta, **Mohit Jain**, Pongsakorn Sukjunnimit, Ramrao Wagh.  
DEV (ACM Symposium on Computing for Development).
- C9 *Energy Usage Attitudes of Urban India.*  
**Mohit Jain**, Deepika Chhabra, Jen Mankoff, Amarjeet Singh.  
ICT4S (International Conference on ICT for Sustainability).
- 2013 C8 *"We are not in the loop": Resource Wastage and Conservation Attitude of Employees in Indian Workplace.*  
**Mohit Jain**, Ankit Agrawal, Sunil K. Ghai, Khai Truong, Deva P. Seetharam.

UbiComp (*ACM International Joint Conference on Pervasive and Ubiquitous Computing*).

- C7 *Comparison of Phone-based Distal Pointing Techniques for Point-Select Tasks.*  
**Mohit Jain**, Andy Cockburn, Sriganesh Madhvanath.  
INTERACT (*Springer IFIP TC13 International Conference on Human-Computer Interaction*).
- C6 *Evaluating the Effect of Phrase Set in Hindi Text Entry.*  
**Mohit Jain**, Khushboo Tekchandani, Khai Truong.  
INTERACT (*Springer IFIP TC13 International Conference on Human-Computer Interaction*).
- C5 *Deep Conservation in Urban India and its Implications for the Design of Conservation Technologies.*  
Yedendra Shrinivasan, **Mohit Jain**, Deva P. Seetharam, Abhishek Choudhary, Elaine M. Huang, Tawanna Dillahunt, Jennifer Mankoff.  
CHI (*ACM Conference on Human Factors in Computing Systems*).
- 2012 C4 *Combating Rural Child Malnutrition through Inexpensive Mobile Phones.*  
Indrani Medhi, **Mohit Jain**, Anuj Tewari, Mohini Bhavsar, Michael Matheke-Fischer, Edward Cutrell.  
NordiCHI (*ACM Nordic Conference on Human-Computer Interaction*).
- C3 *User Learning and Performance with Bezel Menus.*  
**Mohit Jain**, Ravin Balakrishnan.  
CHI (*ACM Conference on Human Factors in Computing Systems*).
- 2011 C2 *Exploring Display Techniques for Mobile Collaborative Learning in Developing Regions.*  
**Mohit Jain**, Jeremy Birnholtz, Edward Cutrell, Ravin Balakrishnan.  
MobileHCI (*ACM Conference on Human-Computer Interaction with Mobile Devices and Services*).
- 2010 C1 *DISHA: Multiple Mice in Narrative Content-based Computer Aided Learning for Children.*  
Aakar Gupta, Praveen Shekhar, Navkar Samdaria, **Mohit Jain**, Joyojeet Pal.  
IDID (*IFIP TC13 SIG on Interaction Design for International Development*).

## ARXIV PAPERS (NOT PEER-REVIEWED)

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- 2023 A2 *PwR: Exploring the Role of Representations in Conversational Programming.*  
Pradyumna YM, Vinod Ganesan, Dinesh Kumar Arumugam, Meghna Gupta, Nischith Shadagopan, Tanay Dixit, Sameer Segal, Pratyush Kumar, **Mohit Jain**, Sriram Rajamani.
- A1 *"Can't Take the Pressure?": Examining the Challenges of Blood Pressure Estimation via Pulse Wave Analysis.*  
Suril Mehta, Nipun Kwatra, **Mohit Jain**, Daniel McDuff.

## PEER-REVIEWED POSTERS, DEMOS & WORKSHOPS

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- 2023 W9 *SignIt! An Android Game for Sign Bilingual Play.*  
Roshni Poddar, Pradyumna YM, Divya Prabha Jayakumar, Tarini Naik, Punyat Tripathi, Nabeel TP, Hemanth Reddy Yeddula, Pratyush Kumar, **Mohit Jain**, Manohar Swaminathan.  
ASSETS (*ACM SIGACCESS Conference on Computers and Accessibility*): Poster.
- 2018 W8 *BigBlueBot: A Demonstration of How to Detect Egregious Conversations with Chatbots.*  
Casey Dugan, Justin D Weisz, Narendra Nath Joshi, Ingrid Lange, James Johnson, **Mohit Jain**, Werner Geyer.  
NeurIPS (*Conference on Neural Information Processing Systems*): Demo.
- 2015 W7 *UrJar: A device to address energy poverty using e-waste.*  
Vikas Chandan, **Mohit Jain**, Harshad Khadiolkar, Zainul Charbiwala, Anupam Jain, Sunil Ghai, Rajesh Kunnath, Deva P. Seetharam.  
eEnergy (*ACM International Conference on Future Energy Systems*): Demo.

- 2014 W6 *Evaluating Demand Response Programs: Getting the Key Performance Indicators Right.* Marilena Minou, George Thanos, Matteo Vasirani, Tanuja Ganu, **Mohit Jain**, Arne Gylling. *eEnergy (ACM International Conference on Future Energy Systems)*: International Workshop on Demand Response.
- 2013 W5 *Replicating Residential Sustainability Study in Urban India.* **Mohit Jain**, M., Yedendra Shrinivasan, Tawanna Dillahunt. *CHI (ACM Conference on Human Factors in Computing Systems)*: RepliCHI Workshop.
- 2012 W4 *The Fate of a Digital Slate: Unexpected Issues with Deployment in Rural India.* Indrani Medhi, Anuj Tewari, **Mohit Jain**, Edward Cutrell. *UXMag (User Experience Magazine)*, 11, 2.
- 2009 W3 *Approaches to Formal Verification of Security Protocols.* Suvansh Lal, **Mohit Jain**, Vikrant Chaplot. *IMY-CRSI National Workshop on Cryptology*.
- W2 *DISHA: DISease and Health Awareness for Children on Multiple Input Devices.* **Mohit Jain**, Aakar Gupta, Navkar Samdaria, Praveen Shekhar, Joyojeet Pal. *ICTD (IEEE/ACM International Conference on Information and Communication Technologies and Development)*: Poster.
- 2008 W1 *From Pilot to Practice: Creating Multiple-Input Multimedia Content for Real-World Deployment.* Joyojeet Pal, Udai Pawar, Apurva Joshi, **Mohit Jain**, Sai Gopal Thota, Sai Teja, Sukumar Anikar. *IUI (ACM International Conference on Intelligent User Interfaces)*: International Workshop on Intelligent User Interfaces for Developing Regions (IUI4DR).

## PATENTS

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- 2019 P19 P201904537US01. *System and Method to Approximate Farm Level Yield Using Marketplace Arrival Data.* Smitkumar N Marvaniya, **Mohit Jain**, Sushain Pandit, Wesley Richards, Dean Daskalantonakis, Jagabondhu Hazra.
- P18 US20210048938A1. *Visual Hierarchy Design Governed User Interface Modification via Augmented Reality.* Willie Scott, Charu D. Pandhi, **Mohit Jain**, Kuntal Dey.
- P17 US2020372569A1. *System and Method for Chatbot Conversation Federation using Real-Time Auctioning.* Kuntal Dey, **Mohit Jain**, Kaushik Lahiri, Sarbajit K. Rakshit.
- 2018 P16 US10782777B2. *Real-Time Alteration of Standard Video and Immersive Video for Virtual Reality.* **Mohit Jain**, Kuntal Dey, Willie Scott, Charu D. Pandhi.  
**GRANTED**
- P15 US20200273080A1. *Product Usage Identification and Recommendation Provision.* Sampath Dechu, **Mohit Jain**, Amrita Saha.
- P14 US20200114206A1. *Exercise Monitoring and Coaching using Audio-only Devices.* **Mohit Jain**, Anup Agarwal, Pratyush Kumar.
- P13 US10928917B2. *Multiple User Interaction with Audio Devices using Speech and Gestures.* **Mohit Jain**, Anup Agarwal, Pratyush Kumar.  
**GRANTED**
- 2017 P12 US10614815B2. *Conversational Challenge-Response System for Enhanced Security in Voice Only Devices.*



**Mohit Jain**, Pratyush Kumar.

**GRANTED**

P11 US10608965B2. *Augmented Conversational Agent.*

Kuntal Dey, **Mohit Jain**, Pratyush Kumar.

**GRANTED**

P10 US10664338B2. *System and Method for Root Cause Analysis in Large Scale Data Curation Flows using Provenance.*

Hima P. Karnam, Manish Kesarwani, Salil Joshi, **Mohit Jain**, Sameep Mehta.

**GRANTED**

P9 US20190163807A1. *Feature Vector Profile Generation for Interviews.*

**Mohit Jain**, Ashok Pon Kumar, Pratyush Kumar, Ramachandra Kota.

P8 US20180295071A1. *Adaptive Communications Display Window.*

**Mohit Jain**, Pratyush Kumar, Ramachandra Kota.

P7 US10810647B2. *Hybrid Virtual and Physical Jewelry Shopping Experience.*

Ashok Pon Kumar, Pratyush Kumar, Anshul B. Shah, **Mohit Jain**, Megha Nawhal, Gyanendra Sharma, Amith Singhee.

**GRANTED**

2016 P6 UW48021.01US1. *Smartphone Based Blood Pressure Measurement using Cameras and Microphone.*  
Edward Wang, **Mohit Jain**, Shwetak Patel.

P5 US20170364229A1. *Display Interaction based upon a Distance of Input.*

**Mohit Jain**, Ashok Pon Kumar.

**GRANTED**

P4 US10598708B2. *Identifying and Prioritizing Errors in Connectivity Models of Distribution Networks for Efficient Field Inspections.*

Ramachandra Kota, Sambaran Bandyopadhyay, Rajendu Mitra, **Mohit Jain**, Vijay Arya.

**GRANTED**

2015 P3 US9980099B2. *Indoor Location Detection using Ceiling Patterns.*

**Mohit Jain**, Megha Nawhal, Saicharan Duppati, Sampath Dechu.

**GRANTED**

P2 US10379639B2. *Single-hand, Full-screen Interaction on a Mobile Device.*

**Mohit Jain**, Ashok Pon Kumar, Zainul M. Charbiwala.

**GRANTED**

2013 P1 WO2013157013. *Selection of User Interface Elements of a Graphical User Interface.*

**Mohit Jain**, Sriganesh Madhvanath, Vimal Sharma.

## INVITED TALKS

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- 2023 T24 Myths and Facts about ChatGPT – Looking into the Future  
*VitreoRetinal Society of India (VRSI) webinar (AI & Chatbots Impacting Future)*
- T23 AI and Global Development  
*Keynote at ACM CHI workshop (Advancing HCI Research and Education within and across South Asia)*
- T22 Evolution of SmartKC  
*Keynote at AIOC (Annual Conference of All India Ophthalmological Society) [by Dr. Pallavi Joshi]*
- T21 Programming by Conversation  
*People+AI event by Ekstep*

2022	T20	Low-Cost Diagnostics (focusing on SmartKC) <i>NamasteHCI, IIT Bombay</i>
	T19	Low-Cost Diagnostics (focusing on SmartKC) <i>FOSCAL - UNAB and Autonomous University of Bucaramanga, Colombia</i>
2021	T18	FarmChat: A Conversational Agent to Answer Farmer Queries <i>18th International Conference on Natural Language Processing, ICON 2021 (Invited Speaker)</i>
	T17	Smartphone-based Technological Solutions for the Global South <i>IIT Gandhinagar (Sabarmati Seminar Series)</i>
	T16	Smartphone-based Diagnostic Solutions <i>IIT Kanpur (Students Research Convention)</i>
	T15	Low-Cost Smartphone-based Diagnostic Solutions <i>IIT Jammu (AI in healthcare workshop)</i>
	T14	Teachers' Perceptions around Digital Games for Children in Low-resource Schools for the Blind <i>IndiaHCI Best of CHI 2021 track (presented by Gesu India)</i>
2020	T13	FarmChat: A Conversational Agent to Answer Farmer Queries <i>IndiaHCI Out of India track</i>
2019	T13	Smartphone-based Technological Solutions for the (Mobile) Developing World <i>SIGCHI Summer School on Expanding the Horizons of Human-Centered AI</i>
	T12	Smartphone-based Technological Solutions for the (Mobile) Developing World <i>IIIT-Delhi</i>
	T11	Smartphone-based Technological Solutions for the (Mobile) Developing World <i>Microsoft Research India</i>
	T10	Technological Solutions for Societal Good <i>Microsoft – AI for Good</i>
	T9	Extending Interactivity, Accessibility and Security of Conversational Systems <i>FX Palo Alto Laboratory (FXPAL)</i>
2018	T8	Building Empathy with Chatbots <i>IBM AI Systems Day</i>
2017	T7	Build a Chatbot in 10-minutes <i>ad:tech</i>
2016	T6	Cognitive Shopping using Watson Conversation Services <i>IBM Digital Leaders Connect</i>
	T5	Cognitive Shopping using Watson Conversation Services <i>IBM Cloud Innovation Forum</i>
2013	T4	Persuade to Conserve <i>École Polytechnique Fédérale de Lausanne (EPFL), Switzerland</i>
	T3	Persuade to Conserve <i>IBM Zurich Research Lab</i>
	T2	Insights into Paper-based Record Management System <i>Microsoft Research India</i>
2012	T1	Energy Efficiency and Conservation <i>IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS)</i>

## TEACHING ASSISTANT EXPERIENCE

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- Spring 2016 CSE 414: Introduction to Data Management  
*Instructor: Dr. Dan Weld, University of Washington*
- Fall 2015 CSE 590P: Advanced Topics in Ubiquitous Computing  
*Instructor: Dr. Mayank Goel, University of Washington*
- Fall 2010 CSC 428/CSC 2514: Human Computer Interaction  
*Instructor: Dr. Khai Truong, University of Toronto*
- Spring 2010 CSC 343: Introduction to Databases  
*Instructor: Dr. Diane Horton, University of Toronto*
- Fall 2009 CSC 369: Operating Systems  
*Instructor: Dr. Karen Reid, University of Toronto*
- Spring 2009 IT 215: Systems Software  
*Instructor: Dr. Anish Mathuria, DA-IICT*
- Fall 2008 IT 205: Data Structures and Algorithms  
*Instructor: Dr. Ashok Amin, DA-IICT*

## VOLUNTARY ACTIVITIES

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### PROGRAM COMMITTEE MEMBER

- 2024 CHI, *ACM Conference on Human Factors in Computing Systems* (Health track)  
IUI, *ACM International Conference on Intelligent User Interfaces*
- 2023 IUI, *ACM International Conference on Intelligent User Interfaces*  
IndiaHCI
- 2022 IUI, *ACM International Conference on Intelligent User Interfaces*  
ICTD, *International Conference on Information and Communication Technologies and Development*  
CUI, *Conference on Conversational User Interfaces*
- 2021 CHI, *ACM Conference on Human Factors in Computing Systems* (Health track)  
IUI, *ACM International Conference on Intelligent User Interfaces*  
CUI, *Conference on Conversational User Interfaces*  
IndiaHCI, *Indian Conference Series on HCI Design and Research*
- 2020 CHI, *ACM Conference on Human Factors in Computing Systems* (Specific Application Areas track)  
IUI, *ACM International Conference on Intelligent User Interfaces*  
ICTD, *International Conference on Information and Communication Technologies and Development*  
COMPASS, *ACM SIGCAS Conference on Computing and Sustainable Societies* (Energy, IOT and Smart Cities track)
- 2019 IUI, *ACM International Conference on Intelligent User Interfaces*

### WORKSHOP ORGANIZER

- 2022 India's Emerging Digital Health Ecosystem.  
*Project Green Workshop, Microsoft*
- 2021 From the Margins to the Centre: Defining New Mission and Vision for HCI Researchers in South Asia.  
CHI, *ACM Conference on Human Factors in Computing Systems*  
Link: <https://hci4south.asia/chi21-workshop/>

## CHAIR

- 2024 **Paper Co-chair**, CHIWORK, *Annual Meeting on Human-Computer Interaction for Work*
- 2021 **Short Paper Co-chair**, IndiaHCI, *Indian Conference Series on HCI Design and Research*
- 2014 **Publicity Chair**, UbiComp, *ACM International Joint Conference on Pervasive and Ubiquitous Computing*
- 2014 **Publicity Chair**, ISWC, *International Symposium on Wearable Computers*

## REVIEWER

- 2011-2024 CHI, *ACM Conference on Human Factors in Computing Systems*
- 2013-2023 IMWUT, *PACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (previously UbiComp)*
- 2015, 19-24 IUI, *ACM International Conference on Intelligent User Interfaces*
- 2012, 19-21 DIS, *ACM Conference on Designing Interactive Systems*
- 2022 IJHCI, *International Journal of Human-Computer Interaction*
- 2021, 2023 TOCHI, *ACM Transactions on Computer-Human Interaction*
- 2021 TSC, *ACM Transactions on Social Computing*
- 2021 TACCESS, *ACM Transactions on Accessible Computing*
- 2021 CUI, *Conference on Conversational User Interfaces*
- 2021 COMSNETS, *Conference on COMMunication Systems and NETworks*
- 2019 UIST, *ACM User Interface Software and Technology*
- 2018 IDC, *Interaction Design & Children*
- 2018 ISS, *ACM Interactive Surfaces and Spaces*
- 2015 JETR, *Journal of Engineering and Technology Research*
- 2014 CSCW, *ACM Conference on Computer-Supported Cooperative Work and Social Computing*
- 2011-2012 MobileHCI, *ACM Conference on Human-Computer Interaction with Mobile Devices and Services*
- 2012 APCHI, *Asia Pacific Conference on Computer Human Interaction*

## STUDENT VOLUNTEER

- 2010 CHI, *ACM Conference on Human Factors in Computing Systems*

## SERVICE at IBM and Microsoft

- 2022-24 Member of the DIB (Diversity, Inclusion and Belonging) Committee, Microsoft Research India.
- 2021-24 Member of the FTE Hiring Committee, Microsoft Research India.
- 2020-2021 Lab Sabha Czar, Microsoft Research India.
- 2019 External Recognition Lead, IBM Research India.
- 2018-2019 Patent Reviewer and Evaluator, IBM Global.
- 2018-2019 HCI PIC (Professional Interest Communities) Chair, IBM Research India.
- 2016-2018 Internship Coordinator, IBM Research India.
- 2012-2019 Volunteered at IBM demo booths in conferences (CHI 2018, COMSNETS 2018, ANTS 2012, etc.)

## MISCELLANEOUS

- 2021-22 External Expert from Industry at the Departmental Board of Studies, Dept. of CSE, NIT Delhi.
- 2013-2014 Teaching children how to use computers in rural Bangalore Government schools.
- 2012-2013 Teaching English to children in rural Bangalore Government schools.

## SELECTED MEDIA

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- Agriculture [P19] **The Hindu**. Karnataka tomato growers to get crop, price forecasts from IBM using AI, ML. Feb 2019.
- [P19] **Business Standard**. Towards farms of the future: How AI is revolutionising agriculture in India. Mar 2019.
- IBM Newsroom**. NSTDA and IBM Research Use AI to Transform Sugarcane Farming in Thailand with Mitr Phol. Mar 2019.
- UrJar [C11, W7] **ProSieben**. Featured on the documentary series *Galileo* on ProSieben (Channel 7) in Germany. 2015.
- [C11, W7] **BBC**. Old Laptop Batteries could Power Slums, IBM says. Dec, 2014.

**MIT Technology Review.** Discarded Laptop Batteries Keep the Lights On. Dec 2014.  
**IEEE Spectrum.** Turning E-Waste into Light. Dec 2014.  
**SlashDot.** Using Discarded Laptop Batteries To Power Lights. Dec 2014.  
**The Register.** IBM Research wants laptop batteries to retire and slum it. Dec 2014.  
**The Economic Times.** Old laptop batteries could power slums in India: Study. Dec 2014.  
**Live Mint.** India's digital transformation needs innovation. Mar 2015.  
**Hindustan Times.** Trashed laptop batteries to power homes. Dec 2014.  
**India Times.** Jugaad! Read What These Guys Did With Discarded Batteries. Jan 2015.  
**NDTV.** IBM Researchers Use Dumped Laptop Batteries to Create Battery Packs. Dec 2014.  
**BGR.** Discarded laptop batteries to create an emergency lighting system. Dec 2014.  
**Newsweek.** Old Laptop Batteries Could Bring Power to India's Slums. Dec 2014.  
**Uber Gizmo.** E-Waste Recycled, Delivers Power In Second Life. Dec 2014.  
**Business Today.** Trashed laptop batteries to power homes. Dec 2014.

DISHA [C1, W2] **Microsoft Blog.** Microsoft Announces Imagine Cup 2009 Worldwide Winners. July 2009.

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