

# 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 for Emerging Markets team
- 2012-2019   IBM Research, India  
Senior Research Engineer, Cognitive IoT team
- 2011-2012   Amazon, USA  
Software Development Engineer, Digital Videogames team

### 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 team  
*Advisor:* Dr. Indrani Medhi, Aishwarya Ratan, Dr. Edward Cutrell
- Summer 2010   Microsoft Research, India  
Visiting Researcher, Technology for Emerging Markets 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 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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- 2022 **Best Subject Paper** at AIOC 2022 for SmartKC [C38, J5].  
**Best Paper of Session** at AIOC 2022 for SmartKC [C38, J5].
- 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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- 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*).
- 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*).
- 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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- 2022 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-LNCS Lecture Notes in Computer Science*).
- 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 (*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 (*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*).

## PEER-REVIEWED POSTERS, DEMOS & WORKSHOPS

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- 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 Khadilkar, 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.

## ADVISING & MENTORING

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### MENTOR (Research Fellow)

2022-23 Meghna Gupta  
Bachelor's student at IIIT Delhi (CSE).



Roshni Poddar  
Bachelor's student at PES University (CSE).

Pradyumna YM  
Bachelor's student at PES University (CSE).

2021-23 Suril Mehta  
Bachelor's student at IIIT Delhi (CSE).

Nimisha Karnatak  
Master's student at IIIT Bangalore (Digital Society).

2020-22 Siddhartha Gairola [C30, J5]  
Master's student at IIIT Hyderabad (CSE). Present: PhD student at Max Planck Institute.

Dhruv Agarwal [J4]  
Bachelor's student at Ashoka University (CS). Present: PhD student at Cornell University.

2019-21 Gesu India [C31, C34, C35]  
Bachelor's student at IIT Patna (Civil). Present: PhD student at Swansea University.

#### CO-ADVISOR

2013 Deepika Chhabra [C9, C13]  
Master's in Computer Science degree, IIIT-Delhi.

#### INTERNSHIPS (8-24 weeks)

2021, 2022 Aditya Aggarwal  
Undergraduate student at IIIT Hyderabad (CSE). Present: Master's student at UC San Diego.

2020 Uddeshya Upadhyay  
Undergraduate student at IIT Bombay (CSE). Present: PhD Student at Max Planck Institute.

Siddhartha Gairola [C30, J5]  
Master's student at IIIT Hyderabad (CSE).

2019 Murtuza Bohra [J5]  
Master's student at IIIT Hyderabad (CSE). Present: Working at Amazon.

Abhijeet Halwai  
Undergraduate student at IIIT Hyderabad (CSE).

2018 Francis Tom [C30]  
Undergraduate student at IIT Kharagpur (EE). Present: Working at Microsoft.

2017 Sudharsan Krishnaswamy  
Undergraduate student at IIT Bhubaneswar (CSE). Present: Student at UC Los Angeles, working at SoundHound.

Francis Tom [C20]  
Undergraduate student at IIT Kharagpur (EE). Present: Working at Microsoft.

Anup Agarwal [C17, P13, P14]  
Undergraduate student at IIT Guwahati (CSE). Present: PhD Student at CMU.

Yuvraj Chugh  
Undergraduate student at NYU (CS).

2015 Saicharan Duppati [C19, P3]

Undergraduate student at IIT Bombay (CSE). Present: Graduated from UC San Diego, working at Salesforce.

2013 Deepika Chhabra [C9, C13]

Graduate student at IIIT-Delhi (CS). Present: Working at SD2 Labs.

Jiten Thakker

Undergraduate student at DA-IICT (ICT). Present: Graduated from NYU, working at Uplevel Security.

Sagar Mohite

Undergraduate student at DA-IICT (ICT). Present: Graduated from Univ of Utah, working at Evernote.

## INVITED TALKS

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|------|-----|---|
| 2022 | T19 | Low-Cost Diagnostics (focusing on SmartKC)<br><i>FOSCAL - UNAB and Autonomous University of Bucaramanga, Colombia</i>   |
| 2021 | T18 | FarmChat: A Conversational Agent to Answer Farmer Queries<br><i>18th International Conference on Natural Language Processing, ICON 2021 (Invited Speaker)</i>     |
|      | T17 | Smartphone-based Technological Solutions for the Global South<br><i>IIT Gandhinagar (Sabarmati Seminar Series)</i>  |
|      | T16 | Smartphone-based Diagnostic Solutions<br><i>IIT Kanpur (Students Research Convention)</i>   |
|      | T15 | Low-Cost Smartphone-based Diagnostic Solutions<br><i>IIT Jammu (AI in healthcare workshop)</i>  |
|      | T14 | Teachers' Perceptions around Digital Games for Children in Low-resource Schools for the Blind<br><i>IndiaHCI Best of CHI 2021 track (presented by Gesu India)</i> |
| 2020 | T13 | FarmChat: A Conversational Agent to Answer Farmer Queries<br><i>IndiaHCI Out of India track</i>   |
| 2019 | T13 | Smartphone-based Technological Solutions for the (Mobile) Developing World<br><i>SIGCHI Summer School on Expanding the Horizons of Human-Centered AI</i>          |
|      | T12 | Smartphone-based Technological Solutions for the (Mobile) Developing World<br><i>IIIT-Delhi</i>   |
|      | T11 | Smartphone-based Technological Solutions for the (Mobile) Developing World<br><i>Microsoft Research India</i>   |
|      | T10 | Technological Solutions for Societal Good<br><i>Microsoft – AI for Good</i>   |
|      | T9  | Extending Interactivity, Accessibility and Security of Conversational Systems<br><i>FX Palo Alto Laboratory (FXPAL)</i>   |
| 2018 | T8  | Building Empathy with Chatbots<br><i>IBM AI Systems Day</i>   |
| 2017 | T7  | Build a Chatbot in 10-minutes<br><i>ad:tech</i>   |
| 2016 | T6  | Cognitive Shopping using Watson Conversation Services<br><i>IBM Digital Leaders Connect</i>   |
|      | T5  | Cognitive Shopping using Watson Conversation Services   |

## *IBM Cloud Innovation Forum*

- 2013     T4   Persuade to Conserve  
*École Polytechnique Fédérale de Lausanne (EPFL), Switzerland*
- T3   Persuade to Conserve  
*IBM Zurich Research Lab*
- T2   Insights into Paper-based Record Management System  
*Microsoft Research India*
- 2012     T1   Energy Efficiency and Conservation  
*IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS)*

## 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

- 2023     IUI, *ACM International Conference on Intelligent User Interfaces*
- 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

- 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

- 2011-2023 CHI, *ACM Conference on Human Factors in Computing Systems*
- 2013-2022 IMWUT, *PACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (previously UbiComp)*
- 2015, 19-22 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 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

- 2022-23 Member of the DIB (Diversity, Inclusion and Belonging) Committee, Microsoft Research India.
- 2021-22 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

Agriculture [P19] **The Hindu**. Karnataka tomato growers to get crop, price forecasts from IBM using AI, ML. Feb 2019.  
**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.  
**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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