Ehsan Hoque

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SUMMARY

I work across academia, government and industry on applying AI to human communication and health. My group's recent work spans uncertainty-aware machine learning for behavior (AAAI, MICCAI), prospective clinical validation (NEJM AI), randomized controlled trials of conversational agents, and experiments on how large language models shape human belief. Our validated systems screen for Parkinson's disease from home and train clinicians through AI virtual patients; my early work on conversation coaching was later built on by Microsoft in PowerPoint's Speaker Coach. As Chief Scientist of the National Center for AI at SDAIA, I directed national-scale programs, and I have contributed to policy through the National Academies and the UK Academy of Medical Sciences.

EDUCATION

2013	**PhD, Media Arts and Sciences**, Massachusetts Institute of Technology (MIT Media Lab) Thesis: Computers to Help with Conversations: Affective Framework to Enhance Human Nonverbal Skills. Advisor: Rosalind Picard. Thesis work highlighted by the MIT Museum as one of MIT's unconventional inventions.
2007	**MS, Electrical and Computer Engineering**, University of Memphis Thesis: What Speech Tells Us about Discourse: The Role of Prosodic and Discourse Features in Dialogue Act Classification.
2004	**BS, Computer Engineering**, Penn State Thesis: Vision Enabled Interactive Robot. Best Senior Design Award.

APPOINTMENTS

Academic

2024 to present	**Professor of Computer Science**, University of Rochester
2020 to 2024	**Associate Professor of Computer Science**, University of Rochester
2013 to 2020	**Assistant Professor of Computer Science**, University of Rochester
2017 to 2020	**Asaro-Biggar ('92) Family Fellow in Data Science**, University of Rochester
2018 to 2019	**Interim Director**, Goergen Institute for Data Science
2016 to 2017	**Assistant Director of Research Outreach**, Goergen Institute for Data Science

Affiliate appointments: Electrical and Computer Engineering; Brain and Cognitive Sciences; Environmental Health Sciences Center; Goergen Institute for Data Science.

Government

2023 to 2024 **Chief Scientist, National Center for AI**, Saudi Data and AI Authority (SDAIA)
Led research and development at the National Center for AI across health, education, energy, environment and media; managed academic centers of excellence and international collaborations.

Industry

2010 **IBM T. J. Watson Research Center**, Research intern
Designed one of the first prototypes that recognizes and uses viewers' affective responses while they watch advertisements.

2009 **Walt Disney Imagineering R&D**, Research intern
Built the vision components of Disney's first autonomous robot that could see, hear and make its own decisions; the system went live during the internship. Video

2006 **Goldman Sachs & Co., New York**, Technology Analyst Intern

HONORS AND AWARDS

2026 Fellow, American Institute for Medical and Biological Engineering (AIMBE)

2026 Alumni Fellow Award, Penn State (the Alumni Association's highest honor) Press release Acceptance speech

2025 Presidential Early Career Award for Scientists and Engineers (PECASE)

2025 Letten Prize, runner-up

2023 ACM UbiComp 10-Year Impact Award (for MACH)

2022 Distinguished Member, Association for Computing Machinery (ACM)

2022 Senior Member, Association for the Advancement of Artificial Intelligence (AAAI)

2020 Emerging Leader in Health and Medicine, National Academy of Medicine Press release MIT Media Lab

2019 Early Career Award for Scientists and Engineers (ECASE-ARMY)

2019 First place, IARPA Credibility Assessment Standardized Evaluation (CASE) Challenge ROC HCI announcement

2019 EU-US Frontiers of Engineering Symposium, National Academy of Engineering

2018 NSF CAREER Award

2017 10 Scientists to Watch, Science News (SN 10) Press release

2017 Asaro-Biggar ('92) Family Fellow in Data Science

2017 Alumni Achievement Award, Penn State Press release Acceptance speech

2016 MIT Technology Review Innovators Under 35 (TR35)

2014 NSF CRII Award

2014, 2016, 2019 Google Faculty Research Award

2010	IEEE Gold Humanitarian Fellowship
2004	Best Senior Design Award, Penn State

Paper awards

2025	Best Paper Nomination, AI in Healthcare (AIiH)
2023	Best Abstract in Clinical Research, Future of Parkinson's Disease Conference
2022	Best Paper Nomination, ACII
2022	Best Paper Nomination, ACM Multimedia (Brave New Ideas)
2017	Best Paper Nomination, ACII
2015	Nominated among the most influential articles, IEEE Transactions on Affective Computing
2014	Excellence in Reviewing Award, ICMI
2013	Best Paper Award, ACM UbiComp (top 5 of 392)
2011	Best Paper Nomination, IEEE FG (top 5 of 245)
2006	Best Paper Nomination, Intelligent Virtual Agents

RESEARCH FUNDING

$20.6 million in external funding, $10 million as PI. Lead PI awards are marked ●.

Sponsored research

2026 to 2028	● **Templeton Foundation**, Transforming Healthcare through the Power of Love: Expanding and Spreading the Living and Leading with Love Framework. $382,380
2022 to 2025	● **Army Research Office**, Enhancing creative productivity in self-organizing social networks (with Gourab Ghoshal). $700,000
2021 to 2024	● **Moore Foundation**, Improve access to quality diagnosis for Parkinson's disease. $500,000
2019 to 2023	**NSF**, Prolonged Exposure Collective Sensing System (PECSS) for PTSD (with Rosa Arriaga, Barbara Rothbaum, Andrew Sherrill, Thomas Ploetz). $1.2M
2019 to 2024	● **Army Research Office**, Human-Machine Symbiosis Framework to Understand Human Deception. $1M
2018 to 2023	**NIH**, Morris K. Udall Center of Excellence in Parkinson's Disease Research at the University of Rochester (with Ray Dorsey et al.). $9.16M
2018 to 2023	● **NSF**, CAREER: A collaboration coach with effective intervention strategies to optimize group performance. $500,000 + $64,000 REU
2015 to 2017	● **NSF**, LISSA: Live Interactive Social Skills Assistant (with Lenhart Schubert). $150,000 + $16,000 REU
2015 to 2019	● **DARPA**, Communication with a Learning Collaborative Problem Solving Agent (Communicating with Computers program; subcontract to IHMC, with Lenhart Schubert). $2.5M

2015 to 2018 ● **Army Research Office**, Automated Modeling of Deceptive Intent in Computer Mediated Conversations. $375,000

2015 to 2017 ● **NSF**, CRII: Enabling Behavior Sensing via the Cloud and its Application to Public Speaking. $180,000 + $32,000 REU

2015 to 2019 ● **NSF**, NRT: Graduate Training in Data-Enabled Research into Human Behavior and its Cognitive and Neural Mechanisms (with Henry Kautz, Greg DeAngelis, Robert Jacobs). $3M

2014 to 2015 ● **DARPA**, Online Platform to Capture and Analyze Audio/Video Data (SSIM program; subcontract to SRI). $118,146

2014 to 2015 ● **NSF**, Student Travel Grants to attend MobiSys 2014. $20,000

Gifts and internal awards

2024 ● **Macy Foundation**, Advancing Healthcare Communication: A Proposal for AI-Driven Training. $24,750

2024 **University of Rochester**, Novel digital motor measures of prodromal LRRK2 Parkinson's disease. $25,000

2022 ● **University of Rochester**, Versatile and Customizable Virtual Patients to Improve Doctor-Patient Communication (with Ron Epstein). $19,831

2022 **University of Rochester**, Cat Moment: Promoting Inclusive Conversation in Small-Group Learning (with Zhen Bai). $38,546

2021 ● **University of Rochester**, Designing Effective Intervention to Promote Green Products in Online Shopping Platforms (with Karen Berger). $19,831

2021 ● **University of Rochester**, Understanding Creative Performances in Social Networks (with Gourab Ghoshal). $42,493

2020 ● **Google**, ExploreCSR (with Zhen Bai). $18,000

2020 ● **Google**, Early diagnosis of Parkinson's from videos. $66,013

2020 **University of Rochester**, Wadsworth C. Sykes Faculty Engineering Award. $3,000

2017 ● **University of Rochester**, A Mixed Reality Smart Glass Virtual Arm for Motor Recovery in Stroke (with Ania Busza). $50,700

2017 **University of Rochester**, Social Modifiers of Stress Regulation and Healthy Aging (with Kathi Heffner, Feng Lin, Duje Tadin, Kim Van Orden). $124,828

2016 ● **Google**, Processing Emotion in the Cloud: Adding a New Dimension in Google Hangouts. $61,858

2015 **University of Rochester**, Aging and Engaging: An Automated Tool to Teach Social Engagement Skills for Older Adults (with Kimberly Van Orden, Paul Duberstein, Yeates Conwell). $50,000

2014 ● **Google**, Online Platform for People to Practice Public Speaking. $62,358

2014 ● **Microsoft**, Processing Emotion in the Cloud. $40,000

PUBLICATIONS

160 publications. Students are typically first authors. Full list with summaries, figures and videos on the Publications page; citations on Google Scholar.

Journal articles (47)

47. M. S. Islam, S. Park, E. X. Ma, T. Adnan, and **E. Hoque**. NeuroSift for Task-Aware Quality Assurance of Multimedia Data in Remote Parkinson Disease Assessment: Machine Learning Model Development and Validation Study. *Journal of Medical Internet Research 28, e91756*, 2026.
46. M. Hasan, K. G. Haut, T. M. Carroll, R. M. Epstein, T. Sen, and **E. Hoque**. The Effects of Generative AI Virtual Patient in Serious Illness Communication Skills: Randomized Controlled Trial. *JMIR Medical Education*, 2026. *In press* DOI Video
45. M. S. Islam, T. Adnan, A. Abdelkader, Z. Liu, E. Ma, S. Park, A. Azad, P. Liu, M. Pawlik, E. Hartman, E. Shelton, K. B. Larson, M. S. Rahman, C. Schwartz, K. Jaffe, J. L. Adams, R. B. Schneider, J. Freyberg, E. R. Dorsey, and **E. Hoque**. Validation of Remote Multimodal AI Screening for Parkinson Disease Across Diverse Settings. *Communications Medicine*, 2026. *In press* Video
44. R. A. Baten, A. S. Bangash, K. Veera, G. Ghoshal, and **E. Hoque**. AI Can Enhance Creativity in Social Networks. *npj Artificial Intelligence*, 2026. *In press* Video
43. M. Z. U. Alam, A. Azad, M. S. Islam, **E. Hoque**, and M. S. Rahman. PULSAR: Graph-Based Positive Unlabeled Learning with Multi-Stream Adaptive Convolutions for Parkinson's Disease Recognition. *ACM Transactions on Computing for Healthcare 7(2)*, 2026. DOI
42. S. Cui, M. Hasan, C. Yeo, P. Daga, **E. Hoque**, N. A. Jallad, and J. Xiao. AI Virtual Standardized Patient Training for Perinatal Dental Communication: A Pilot Study. *Journal of Dental Education*, 2026. Video
41. T. M. T. Adnan, A. Abdelkader, M. S. Islam, M. Pawlik, E. Hartman, **E. Hoque**, and R. B. Schneider. Multimodal Remote Digital Phenotyping for Detecting and Tracking Early Parkinsonian Change in LRRK2 Carriers. *Research Square (preprint)*, 2026. *Preprint* PMC DOI
40. **E. Hoque** and C. Pinhanez. Designing Nudges, Not Shortcuts, in the Age of AI. *IEEE Pervasive Computing 24(2)*, 2025.
39. A. M. Proma, N. Pate, R. A. Baten, S. Chen, J. N. Druckman, G. Ghoshal, and **E. Hoque**. Exploring the Role of Randomization on Belief Rigidity in Online Social Networks. *IEEE Transactions on Affective Computing*, 2025.
38. C. M. Baseman, M. Hasan, N. Swinger, S. A. M. Rauch, **E. Hoque**, and R. I. Arriaga. 'Poker with Play Money': Exploring Psychotherapist Training with Virtual Patients. *Proceedings of the ACM on Human-Computer Interaction 9(7), CSCW*, 2025. DOI
37. H. Khamees, A. Gulati, A. Vatsa, M. Aldosari, and **E. Hoque**. Estimating Autism Prevalence Among Children in the Kingdom of Saudi Arabia: A Comprehensive Multisource Benchmarking Approach. *Saudi Medical Journal 46(11)*, 2025.

36. T. Adnan, M. S. Islam, S. Lee, E. M. W. R. Chowdhury, S. D. Tithi, K. Noshin, M. R. Islam, I. Sarker, M. S. Rahman, R. B. Schneider, J. L. Adams, E. R. Dorsey, and **E. Hoque**. AI-Enabled Parkinson's Disease Screening Using Smile Videos. *NEJM AI 2(7)*, 2025. DOI

35. T. Adnan, A. Abdelkader, Z. Liu, E. Hossain, S. Park, M. S. Islam, and **E. Hoque**. A Novel Fusion Architecture for PD Detection Using Semi-Supervised Speech Embeddings. *npj Parkinson's Disease 11(1)*, 2025. arXiv Video

34. S. Kelty, R. A. Baten, A. M. Proma, **E. Hoque**, J. Bollen, and G. Ghoshal. Don't Follow the Leader: Independent Thinkers Create Scientific Innovation. *Humanities and Social Sciences Communications*, 2025.

33. B. Kane, C. Giugno, L. Schubert, K. Haut, C. Wohn, and **E. Hoque**. Managing Emotional Dialogue for a Virtual Cancer Patient: A Schema-Guided Approach. *IEEE Transactions on Affective Computing 15(3)*, 2024.

32. W. Rahman, A. Abdelkader, S. Lee, P. Yang, M. S. Islam, T. Adnan, M. Hasan, E. Wagner, S. Park, E. R. Dorsey, C. Schwartz, K. Jaffe, and **E. Hoque**. A User-Centered Framework to Empower People with Parkinson's Disease. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) 7(4)*, 2024.

31. M. S. Islam, W. Rahman, A. Abdelkader, S. Lee, P. T. Yang, J. L. Purks, J. L. Adams, R. B. Schneider, E. R. Dorsey, and **E. Hoque**. Using AI to Measure Parkinson's Disease Severity at Home. *npj Digital Medicine 6*, 2023. Article Video

30. M. S. Islam, A. M. Proma, C. Wohn, K. Berger, S. Uong, V. Kumar, K. S. Korfmacher, and **E. Hoque**. SEER: Sustainable E-commerce with Environmental-impact Rating. *Cleaner Environmental Systems 8*, 2023. Article

29. W. Rahman, M. Hasan, M. S. Islam, T. Olubajo, J. Thaker, A. Abdelkader, P. Yang, H. Paulson, G. Oz, A. Durr, T. Klockgether, T. Ashizawa, and **E. Hoque**. Auto-Gait: Automatic Ataxia Risk Assessment with Computer Vision from Gait Task Videos. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*, 2023.

28. R. A. Baten, R. N. Aslin, G. Ghoshal, and **E. Hoque**. Novel Idea Generation in Social Networks Is Optimized by Exposure to a 'Goldilocks' Level of Idea-Variability. *PNAS Nexus 1(5)*, 2022. Article

27. T. K. Sen, K. Haut, D. Lomakin, and **E. Hoque**. A Mental Trespass? Unveiling Truth, Exposing Thoughts and Threatening Civil Liberties with Non-Invasive AI Lie Detection. *IEEE Transactions on Technology and Society 3(3)*, 2022. Article

26. S. Z. Razavi, L. Schubert, K. Van Orden, M. R. Ali, B. Kane, and **E. Hoque**. Discourse Behavior of Older Adults Interacting with a Dialogue Agent Competent in Multiple Topics. *ACM Transactions on Interactive Intelligent Systems (TiiS) 12(2)*, 2022. Article

25. W. Chowdhury, S. Lee, M. S. Islam, V. Antony, H. Ratnu, M. R. Ali, A. Mamun, E. Wagner, S. Jensen-Roberts, E. Waddell, T. Myers, M. Pawlik, J. Soto, M. Coffey, A. Sarkar, R. Schneider, C. Tarolli, K. Lizarraga, J. Adams, M. Little, E. R. Dorsey, and **E. Hoque**. Detecting Parkinson's Disease from an Online Speech-Task: Observational Study. *Journal of Medical Internet Research 23(10)*, 2021. Article

24. T. K. Sen, G. Naven, L. Gerstner, D. Bagley, R. A. Baten, W. Chowdhury, M. K. Hasan, K. Haut, A. Mamun, S. Samrose, A. S. Slowe, E. Barnes, M. Frank, and **E. Hoque**. DBATES: Distinguishing Benefits of Audio, Textual, and Facial Expression Features in Competitive Debate Speeches. *IEEE Transactions on Affective Computing*, 2021.
23. R. A. Baten, R. N. Aslin, G. Ghoshal, and **E. Hoque**. Cues to Gender and Racial Identity Reduce Creativity in Diverse Social Networks. *Scientific Reports 11, 10261*, 2021. Article Video
22. M. R. Ali, T. K. Sen, Q. Li, R. Langevin, T. Myers, S. Sharma, E. R. Dorsey, and **E. Hoque**. Analyzing Head Pose in Remotely-Collected Videos of People with Parkinson's Disease. *ACM Transactions on Computing for Healthcare 2(4)*, 2021.
21. K. Sibley, C. Girges, **E. Hoque**, and T. Foltynie. Video-Based Analyses of Parkinson's Disease Severity: A Review. *Journal of Parkinson's Disease*, 2021. Article
20. J. Wang, M. Lavender, P. Brophy, **E. Hoque**, and H. Kautz. A Patient-Centered Digital Scribe for Automatic Medical Documentation. *JAMIA Open 4(1)*, 2021. Article
19. M. R. Ali, T. K. Sen, B. Kane, S. Bose, T. Carroll, R. Epstein, L. Schubert, and **E. Hoque**. Novel Computational Linguistic Measures, Dialogue System and the Development of SOPHIE: Standardized Online Patient for Healthcare Interaction Education. *IEEE Transactions on Affective Computing*, 2021. Video
18. M. R. Ali, **E. Hoque**, P. Duberstein, L. Schubert, S. Z. Razavi, B. Kane, C. Silva, J. S. Daks, M. Huang, and K. Van Orden. Aging and Engaging: A Pilot Randomized Controlled Trial of an Online Conversational Skills Coach for Older Adults. *American Journal of Geriatric Psychiatry*, 2020.
17. R. A. Baten and **E. Hoque**. Technology-Driven Alteration of Nonverbal Cues and Its Effects on Negotiation. *Negotiation Journal*, 2020. arXiv
16. A. Zaman, B. Zhang, V. Silenzio, H. Kautz, and **E. Hoque**. The Relationship Between Deteriorating Mental Health Conditions and Longitudinal Behavioral Changes in Google and YouTube Usage Among College Students in the United States During COVID-19: Observational Study. *JMIR Mental Health*, 2020. Article
15. R. A. Baten, D. Bagley, A. Tenesaca, F. Clark, J. P. Bagrow, G. Ghoshal, and **E. Hoque**. Creativity in Temporal Social Networks: How Divergent Thinking Is Impacted by One's Choice of Peers. *Journal of the Royal Society Interface*, 2020.
14. F. Shahid, W. Rahman, M. S. Rahman, S. Purabi, A. Seddiqa, M. Mostakim, F. Feroz, T. R. Soron, F. Hossain, N. Khan, A. B. Islam, N. Paul, **E. Hoque**, and A. Islam. Leveraging Free-Hand Sketches for Potential Screening of PTSD. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*, 2020.
13. M. Tran, T. K. Sen, K. G. Haut, M. R. Ali, and **E. Hoque**. Are You Really Looking at Me? A Feature-Extraction Framework for Estimating Interpersonal Eye Gaze from Conventional Video. *IEEE Transactions on Affective Computing*, 2020.
12. E. R. Dorsey et al.. Deep Phenotyping of Parkinson's Disease. *Journal of Parkinson's Disease*, 2020. Article

11. P. Butow and **E. Hoque**. Using Artificial Intelligence to Analyze and Teach Communication in Healthcare. *The Breast 50*, 2020. Article
10. R. Langevin, M. R. Ali, T. Sen, C. Snyder, T. Myers, E. R. Dorsey, and **E. Hoque**. The PARK Framework for Automated Analysis of Parkinson's Disease Characteristics. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*, 2019. Video
9. S. Samrose, R. Zhao, J. White, V. Li, L. Nova, Y. Lu, M. R. Ali, and **E. Hoque**. CoCo: Collaboration Coach for Understanding Team Dynamics During Video Conferencing. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*, 2018.
8. T. Sen, M. K. Hasan, Z. Teicher, and **E. Hoque**. Automated Dyadic Data Recorder (ADDR) Framework and Analysis of Facial Cues in Deceptive Communication. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*, 2018. Video
7. R. Shafipour, R. A. Baten, M. K. Hasan, G. Ghoshal, G. Mateos, and **E. Hoque**. Buildup of Speaking Skills in an Online Learning Community: A Network-Analytic Exploration. *Palgrave Communications*, 2018. Article
6. I. Naim, M. I. Tanveer, D. Gildea, and **E. Hoque**. Automated Analysis and Prediction of Job Interview Performance. *IEEE Transactions on Affective Computing 9*, 2018.
5. K. Van Orden, M. R. Ali, K. Parkhurst, P. Duberstein, and **E. Hoque**. Aging and Engaging: The Development of an Automated Tool to Teach Social Engagement Skills. *American Journal of Geriatric Psychiatry 25(3)*, 2017.
4. R. Zhao, V. Li, H. Barbosa, G. Ghoshal, and **E. Hoque**. A Semi-Automated, Collaborative, and Online Training Module for Communication Skills. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*, 2017.
3. **E. Hoque** and R. W. Picard. Rich Nonverbal Sensing to Enable New Possibilities in Social Skills Training. *IEEE Computer, special issue on Aware Computing*, 2014.
2. **E. Hoque**, D. J. McDuff, and R. W. Picard. Exploring Temporal Patterns towards Classifying Frustrated and Delighted Smiles. *IEEE Transactions on Affective Computing 3(3)*, 2012. *Nominated among the most influential TAC articles, 2015* MIT News Video
1. J. C. Heigel, J. S. Andrawes, J. T. Roth, **E. Hoque**, and R. M. Ford. Determining the Viability of Electrically Treating 6061 T6511 Aluminum for Use in Manufacturing Processes. *Transactions of the North American Manufacturing Research Institute of SME (NAMRI/SME)*, 2005.

Conference papers (60)

60. A. Azad, M. S. H. Shanto, M. S. Hossain, B. Alwuqaysi, S. Boughorbel, Y. Bokhari, A. Aljouie, A. O. Sindi, and **E. Hoque**. Harf-Speech: A Clinically Aligned Framework for Arabic Phoneme-Level Speech Assessment. *INTERSPEECH 2026, Sydney*, 2026.
59. C. Ozel, W. Nadeem, S. Potter, Y. Bokhari, B. Alwuqaysi, W. Alotaibi, R. F. Alnufaie, S. Boughorbel, A. Aljouie, R. Altasan, and **E. Hoque**. Design and Evaluation of a Culturally Adapted Multimodal Virtual Agent for PTSD Screening. *ACM International Conference on Intelligent Virtual Agents (IVA 2026)*, 2026.

58. M. S. Islam, E. Hossain, A. Abdelkader, T. Adnan, F. R. Mashrur, S. Park, P. Kumar, Q. Sudais, N. Chunga, N. Shah, J. Freyberg, C. Kanan, R. Schneider, and **E. Hoque**. Benchmarking Video Foundation Models for Remote Parkinson's Disease Screening. *MICCAI 2026, Strasbourg*, 2026. arXiv

57. K. Ong, S. Boughorbel, L. Xiao, C. Ekbote, W. Dai, A. Qu, J. Wu, R. Mao, **E. Hoque**, E. Cambria, G. Mengaldo, and P. P. Liang. OmniSapiens: A Foundation Model for Social Behavior Processing via Heterogeneity-Aware Relative Policy Optimization. *International Conference on Machine Learning (ICML 2026), Seoul*, 2026. Video

56. M. Hasan, C. Ozel, N. Long, A. Martin, S. Potter, T. Adnan, S. Lee, A. Zadeh, and **E. Hoque**. Hi5: Synthetic Data for Inclusive, Robust, Hand Pose Estimation. *Affective Computing and Intelligent Interaction (ACII 2025)*, 2025.

55. A. Azad, M. S. Islam, **E. Hoque**, and M. S. Rahman. Beyond Accuracy: Enhancing Parkinson's Diagnosis with Uncertainty Quantification of Machine Learning Models. *International Conference on AI in Healthcare (AIiH 2025), University of Cambridge*, 2025. *Best Paper Nomination*

54. A. M. Proma, N. Pate, J. N. Druckman, G. Ghoshal, and **E. Hoque**. Personalizing LLM Responses to Combat Political Misinformation. *ACM Conference on User Modeling, Adaptation and Personalization (UMAP 2025)*, 2025.

53. M. S. Islam, T. Adnan, J. Freyberg, S. Lee, A. Abdelkader, M. Pawlik, C. Schwartz, K. Jaffe, R. B. Schneider, E. R. Dorsey, and **E. Hoque**. Accessible, At-Home Detection of Parkinson's Disease via Multi-task Video Analysis. *AAAI Conference on Artificial Intelligence (AAAI 2025)*, 2025. arXiv Video

52. Y. Zhang, P. Liu, W. Gao, W. Dong, L. Ai, Z. Gong, S. Huang, Z. Li, **E. Hoque**, and J. Hirschberg. A Survey on Open Information Extraction from Rule-based Model to Large Language Model. *Empirical Methods in Natural Language Processing (EMNLP 2024)*, 2024.

51. J. Spann, S. Chen, T. Ashizawa, and **E. Hoque**. Getting on the Right Foot: Using Observational and Quantitative Methods to Evaluate Movement Disorders. *ACM Conference on Intelligent User Interfaces (IUI 2024)*, 2024.

50. K. Haut, C. Wohn, B. Kane, T. Carroll, C. Giugno, V. Kumar, R. Epstein, L. Schubert, and **E. Hoque**. Validating a Virtual Human and Automated Feedback System for Training Doctor-Patient Communication Skills. *Affective Computing and Intelligent Interaction (ACII 2023), Boston*, 2023.

49. M. S. Islam, A. M. Proma, Y. Zhou, S. N. Akter, C. Wohn, and **E. Hoque**. KnowUREnvironment: An Automated Knowledge Graph for Climate Change and Environmental Issues. *AAAI Fall Symposium: The Role of AI in Responding to Climate Change*, 2022.

48. A. M. Proma, M. S. Islam, S. Ciko, R. A. Baten, and **E. Hoque**. NADBenchmarks: A Compilation of Benchmark Datasets for Machine Learning Tasks Related to Natural Disasters. *AAAI Fall Symposium: The Role of AI in Responding to Climate Change*, 2022.

47. K. Haut, A. Blumenthal, S. Atterbury, X. Zhou, W. Rahman, E. Natali, M. R. Ali, and **E. Hoque**. Assistive Video Filters for People with Parkinson's Disease to Remove Tremors and Adjust Voice. *Affective Computing and Intelligent Interaction (ACII 2022)*, 2022. *Best Paper Nomination*

46. K. Haut, C. Wohn, V. Antony, A. Goldfarb, M. Welsh, D. Sumanthiran, M. R. Ali, and **E. Hoque**. Systematic Feature Isolation for Bias Research Using Deepfakes. *ACM International Conference on Multimedia (ACM MM 2022), Brave New Ideas*, 2022. *Best Paper Nomination*
45. S. Samrose and **E. Hoque**. Suggestive Motivational Interviewing Agent for Remote Group Discussion. *ACM International Conference on Supporting Group Work (GROUP 2022)*, 2022.
44. M. K. Hasan, J. Spann, M. Hasan, M. S. Islam, K. Haut, R. Mihalcea, and **E. Hoque**. Hitting Your MARQ: Multimodal ARgument Quality Assessment in Long Debate Video. *Empirical Methods in Natural Language Processing (EMNLP 2021)*, 2021.
43. M. K. Hasan, S. Lee, W. Rahman, A. Zadeh, R. Mihalcea, L.-P. Morency, and **E. Hoque**. Humor Knowledge Enriched Transformer for Understanding Multimodal Humor. *AAAI Conference on Artificial Intelligence (AAAI 2021)*, 2021.
42. A. Zaman, H. Kautz, **E. Hoque**, V. Silenzio, C. Nichols, and C. Cerulli. Discovering Intimate Partner Violence from Web Search History. *IEEE/ACM Conference on Connected Health (CHASE 2020)*, 2020.
41. M. R. Ali, S. Z. Razavi, R. Langevin, A. Al-Mamun, B. Kane, R. Rawassizadeh, L. Schubert, and **E. Hoque**. A Virtual Conversational Agent for Teens with Autism Spectrum Disorder: Experimental Results and Design Lessons. *ACM Intelligent Virtual Agents (IVA 2020), Glasgow*, 2020.
40. W. Rahman, M. K. Hasan, S. Lee, A. Zadeh, C. Mao, L.-P. Morency, and **E. Hoque**. Integrating Multimodal Information in Large Pretrained Transformers. *Association for Computational Linguistics (ACL 2020)*, 2020.
39. M. R. Ali, J. Hernandez, E. R. Dorsey, **E. Hoque**, and D. McDuff. Spatio-Temporal Attention and Magnification for Classification of Parkinson's Disease from Videos Collected via the Internet. *IEEE Automatic Face and Gesture Recognition (FG 2020)*, 2020.
38. G. Naven, T. K. Sen, L. Gerstner, K. G. Haut, M. Wen, and **E. Hoque**. Leveraging Shared and Divergent Facial Expression Behavior Between Genders in Deception Detection. *IEEE Automatic Face and Gesture Recognition (FG 2020)*, 2020.
37. M. K. Hasan, W. Rahman, A. Zadeh, J. Zhong, M. I. Tanveer, L.-P. Morency, and **E. Hoque**. UR-FUNNY: A Multimodal Language Dataset for Understanding Humor. *Empirical Methods in Natural Language Processing (EMNLP 2019), Hong Kong*, 2019.
36. M. K. Hasan, W. Rahman, L. Gerstner, T. K. Sen, S. Lee, K. G. Haut, and **E. Hoque**. Facial Expression Based Imagination Index and a Transfer Learning Approach to Detect Deception. *Affective Computing and Intelligent Interaction (ACII 2019), Cambridge, UK*, 2019.
35. M. R. Ali, T. Sen, V. Nguyen, R. Rawassizadeh, P. Duberstein, R. Epstein, and **E. Hoque**. What Computers Can Teach Us About Doctor-Patient Communication: Leveraging Gender Differences in Cancer Care. *Affective Computing and Intelligent Interaction (ACII 2019), Cambridge, UK*, 2019.
34. R. A. Baten, F. Clark, and **E. Hoque**. Upskilling Together: How Peer-Interaction Influences Speaking-Skills Development Online. *Affective Computing and Intelligent Interaction (ACII 2019), Cambridge, UK*, 2019.

33. S. Samrose, W. Chu, C. He, Y. Gao, S. S. Shahrin, Z. Bai, and **E. Hoque**. Visual Cues for Disrespectful Conversation Analysis. *Affective Computing and Intelligent Interaction (ACII 2019), Cambridge, UK*, 2019.
32. M. K. Hasan, T. K. Sen, Y. Yang, R. A. Baten, K. G. Glenn, and **E. Hoque**. LIWC Into the Eyes: Using Facial Features to Contextualize Linguistic Analysis in Multimodal Communication. *Affective Computing and Intelligent Interaction (ACII 2019), Cambridge, UK*, 2019.
31. M. R. Ali, T. K. Sen, D. Crasta, V.-D. Nguyen, R. Rogge, and **E. Hoque**. The What, When, and Why of Facial Expressions: An Objective Analysis of Conversational Skills in Speed-Dating Videos. *IEEE Automatic Face and Gesture Recognition (FG 2018)*, 2018.
30. T. K. Sen, M. K. Hasan, M. Tran, M. Levin, Y. Yang, and **E. Hoque**. Say CHEESE: Common Human Emotional Expression Set Encoder Analysis of Smiles in Honest and Deceptive Communication. *IEEE Automatic Face and Gesture Recognition (FG 2018), Xi'an*, 2018.
29. M. I. Tanveer, S. Samrose, R. A. Baten, and **E. Hoque**. How Emotional Trajectories Affect Audience Perception in Public Speaking. *ACM Conference on Human Factors in Computing Systems (CHI 2018), Montreal*, 2018.
28. M. R. Ali, K. Van Orden, K. Parkhurst, V. D. Nguyen, S. Liu, P. Duberstein, and **E. Hoque**. Aging and Engaging: A Social Conversational Skills Training Program for Older Adults. *ACM Conference on Intelligent User Interfaces (IUI 2018), Tokyo*, 2018.
27. R. Li, J. Curhan, and **E. Hoque**. Understanding Social Interpersonal Interaction via Synchronization Templates of Facial Events. *AAAI Conference on Artificial Intelligence (AAAI 2018)*, 2018.
26. L. Chen, R. Zhao, B. Lehman, C. Leong, G. Feng, and **E. Hoque**. Automated Video Judgement on a Large-Sized Corpus Collected Online. *Affective Computing and Intelligent Interaction (ACII 2017)*, 2017. *Best Paper Nomination*
25. T. Sen, M. R. Ali, P. Duberstein, R. Epstein, and **E. Hoque**. Modeling Doctor-Patient Communication with Affective Text Analysis. *Affective Computing and Intelligent Interaction (ACII 2017)*, 2017.
24. S. Z. Razavi, L. Schubert, M. R. Ali, and **E. Hoque**. Managing Casual Spoken Dialogue Using Flexible Schemas, Pattern Transduction Trees, and Gist Clauses. *Advances in Cognitive Systems (ACS 2017), Troy, NY*, 2017.
23. S. Z. Razavi, M. R. Ali, T. Smith, L. Schubert, and **E. Hoque**. The LISSA Virtual Human and ASD Teens: An Overview of Initial Experiments. *Intelligent Virtual Agents (IVA 2016), Los Angeles*, 2016.
22. M. R. Ali, F. Ciano, R. Zhao, I. Naim, and **E. Hoque**. ROC Comment: Automated Descriptive and Subjective Captioning of Behavioral Videos. *ACM UbiComp 2016, Heidelberg*, 2016.
21. M. I. Tanveer, R. Zhao, K. Chen, Z. Tiet, and **E. Hoque**. AutoManner: An Automated Interface for Making Public Speakers Aware of Their Mannerisms. *ACM Conference on Intelligent User Interfaces (IUI 2016)*, 2016.
20. M. I. Tanveer, J. Liu, and **E. Hoque**. Unsupervised Extraction of Human-Interpretable Nonverbal Behavioral Cues in a Public Speaking Scenario. *ACM Multimedia (ACM MM 2015)*, 2015.

19. M. Fung, Y. Jin, R. Zhao, and **E. Hoque**. ROC Speak: Semi-Automated Personalized Feedback on Nonverbal Behavior from Recorded Videos. *ACM UbiComp 2015, Osaka*, 2015. Video
18. C. Ryan, K. Ciesinski, and **E. Hoque**. Vowel Shapes: An Open-Source, Interactive Tool to Assist Singers with Learning Vowels. *ACM UbiComp 2015, Osaka*, 2015. Video
17. M. R. Ali, D. Crasta, L. Jin, A. Baretto, J. Pachter, R. Rogge, and **E. Hoque**. LISSA: Live Interactive Social Skill Assistance. *Affective Computing and Intelligent Interaction (ACII 2015)*, 2015. *Oral presentation* Video
16. I. Naim, M. I. Tanveer, D. Gildea, and **E. Hoque**. Automated Prediction of Job Interview Performance: The Role of What You Say and How You Say It. *IEEE Automatic Face and Gesture Recognition (FG 2015), Slovenia*, 2015. *Oral presentation*
15. R. Li, J. Curhan, and **E. Hoque**. Role of Synchronized Facial Expressions to Predict Negotiation Outcome. *IEEE Automatic Face and Gesture Recognition (FG 2015), Slovenia*, 2015.
14. M. I. Tanveer, E. Lin, and **E. Hoque**. Rhema: A Real-Time In-Situ Intelligent Interface to Help People with Public Speaking. *ACM Conference on Intelligent User Interfaces (IUI 2015), Atlanta*, 2015. Video
13. **E. Hoque**, M. Courgeon, J.-C. Martin, B. Mutlu, and R. W. Picard. MACH: My Automated Conversation coacH. *ACM UbiComp 2013, Zurich*, 2013. *Best Paper Award (top 5 of 392). UbiComp 10-Year Impact Award, 2023* MIT News Video
12. J. Hernandez*, **E. Hoque***, W. Drevo, and R. W. Picard (*equal contribution). Mood Meter: Counting Smiles in the Wild. *ACM UbiComp 2012, Pittsburgh*, 2012. Video
11. **E. Hoque**, L.-P. Morency, and R. W. Picard. Are You Friendly or Just Polite? Analysis of Smiles in Spontaneous Face-to-Face Interactions. *Affective Computing and Intelligent Interaction (ACII 2011), Memphis*, 2011. *Oral presentation*
10. **E. Hoque** and R. W. Picard. Acted vs. Natural Frustration and Delight: Many People Smile in Natural Frustration. *IEEE Automatic Face and Gesture Recognition (FG 2011), Santa Barbara*, 2011. *Best Paper Nomination (top 5 of 245)* Video
9. **E. Hoque**, R. el Kaliouby, and R. W. Picard. When Human Coders (and Machines) Disagree on the Meaning of Facial Affect in Spontaneous Videos. *Intelligent Virtual Agents (IVA 2009), Amsterdam*, 2009.
8. **E. Hoque**, J. K. Lane, R. el Kaliouby, M. Goodwin, and R. W. Picard. Exploring Speech Therapy Games with Children on the Autism Spectrum. *INTERSPEECH 2009, Brighton*, 2009. Video
7. M. M. Louwerse, P. Jeuniaux, B. Zhang, J. Wu, and **E. Hoque**. The Interaction between Information and Intonation Structure: Prosodic Marking of Theme and Rheme. *Annual Meeting of the Cognitive Science Society (CogSci 2008), Washington, DC*, 2008.
6. **E. Hoque**, M. S. Sorower, M. Yeasin, and M. M. Louwerse. What Speech Tells Us about Discourse: The Role of Prosodic and Discourse Features in Dialogue Act Classification. *IEEE International Joint Conference on Neural Networks (IJCNN 2007), Orlando*, 2007.
5. M. M. Louwerse, N. Benesh, **E. Hoque**, P. Jeuniaux, G. Lewis, J. Wu, and M. Zirnstein. Multimodal Communication in Face-to-Face Conversations. *Annual Meeting of the Cognitive Science Society (CogSci 2007), Nashville*, 2007.

4. **E. Hoque**, M. Yeasin, and M. M. Louwerse. Robust Recognition of Emotion from Speech. *Intelligent Virtual Agents (IVA 2006), Marina del Rey*, 2006. *Best Paper Nomination*
3. M. M. Louwerse, P. Jeuniaux, **E. Hoque**, J. Wu, and G. Lewis. Multimodal Communication in Computer-Mediated Map Task Scenarios. *Annual Conference of the Cognitive Science Society (CogSci 2006), Vancouver*, 2006.
2. **E. Hoque**, D. J. Russomanno, and M. Yeasin. 2D Captchas from 3D Models. *IEEE SoutheastCon 2006, Memphis*, 2006.
1. **E. Hoque**, R. M. Ford, and J. T. Roth. Automated Image Analysis of Microstructure Changes in Metal Alloys. *IS&T/SPIE Electronic Imaging: Machine Vision Applications in Industrial Inspection XVIII, San Jose*, 2005.

Preprints (16)

16. M. Hasan, J. Zhao, and **E. Hoque**. HAL: Inducing Human-likeness in LLMs with Alignment. *arXiv:2601.02813*, 2026. PDF
15. N. Pate, A. M. Proma, H. He, J. N. Druckman, D. C. Molden, G. Ghoshal, and **E. Hoque**. Replicating Human Motivated Reasoning Studies with LLMs. *arXiv:2601.16130*, 2026. PDF
14. A. M. Proma, N. Pate, J. N. Druckman, G. Ghoshal, H. He, and **E. Hoque**. Can LLMs Emulate Human Belief Dynamics?. *arXiv:2605.18781*, 2026. PDF
13. A. Azad, M. S. Hossain, M. Shanto, S. Boughorbel, A. Aljouie, B. Alwuqaysi, Y. Bokhari, A. O. Sindi, and **E. Hoque**. Digital Harf: A Clinically Integrated Multimodal AI System for Pervasive Arabic Speech and Language Therapy. *arXiv:2607.27212*, 2026.
12. M. Hasan, R. Epstein, T. Carroll, and **E. Hoque**. Scalable AI-Based Clinical Communication Training and Automated Assessment. *arXiv:2609.22517*, 2026. PDF
11. K. Haut, M. Hasan, T. Carroll, R. Epstein, T. Sen, and **E. Hoque**. AI Standardized Patient Improves Human Conversations in Advanced Cancer Care. *arXiv:2505.02694*, 2025. PDF
10. D. Zhang, P. Liu, X. Zhou, Y. Ge, G. Lan, J. Bi, C. Brinton, **E. Hoque**, and J. Luo. VisualActBench: Can VLMs See and Act like a Human?. *arXiv:2512.09907*, 2025. PDF
9. A. M. Proma, N. Pate, J. Druckman, G. Ghoshal, H. He, and **E. Hoque**. How LLMs Fail to Support Fact-Checking. *arXiv:2503.01902*, 2025. PDF
8. A. M. Proma, N. Pate, S. Kelty, G. Ghoshal, J. N. Druckman, and **E. Hoque**. Personalized Large Language Models Can Increase the Belief Accuracy of Social Networks. *arXiv:2506.06153*, 2025. PDF
7. M. K. Hasan, M. S. Islam, S. Lee, W. Rahman, I. Naim, M. I. Khan, and **E. Hoque**. TextMI: Textualize Multimodal Information for Integrating Non-Verbal Cues in Pre-Trained Language Models. *arXiv:2303.15430*, 2023. PDF
6. K. Haut, C. Wohn, V. Antony, A. Goldfarb, M. Welsh, D. Sumanthiran, J.-z. Jang, M. R. Ali, and **E. Hoque**. Could You Become More Credible by Being White? Assessing Impact of Race on Credibility with Deepfakes. *arXiv:2102.08054*, 2021. PDF

5. S. Samrose, R. Rawassizadeh, and **E. Hoque**. Immediate or Reflective? Effects of Real-Time Feedback on Group Discussions over Videochat. *arXiv:2011.06529*, 2020. PDF
4. M. I. Tanveer, M. K. Hasan, D. Gildea, and **E. Hoque**. Predicting TED Talk Ratings from Language and Prosody. *arXiv:1906.03940*, 2019. PDF
3. M. I. Tanveer, M. K. Hasan, D. Gildea, and **E. Hoque**. A Causality-Guided Prediction of the TED Talk Ratings from the Speech-Transcripts Using Neural Networks. *arXiv:1905.08392*, 2019. PDF
2. B. Hecht, L. Wilcox, J. P. Bigham, J. Schöning, **E. Hoque**, J. Ernst, Y. Bisk, L. D. Russis, L. Yarosh, B. Anjum, D. Contractor, and C. Wu. It's Time to Do Something: Mitigating the Negative Impacts of Computing Through a Change to the Peer Review Process. *ACM Future of Computing Academy (2018); arXiv:2112.09544*, 2018. PDF
1. M. I. Tanveer, R. Zhao, and **E. Hoque**. Automatic Identification of Non-Meaningful Body-Movements and What It Reveals About Humans. *arXiv:1707.04790*, 2017. PDF

Workshops, abstracts and demos (34)

34. **E. Hoque**, D. Schillinger, Z. Imel, K. Saab, and R. Epstein. New Developments in Artificial Intelligence to Enhance Communication Research and Skills Training. *Patient Education and Counseling 137, 109138*, 2025.
33. K. G. Haut, R. Epstein, T. M. Carroll, B. Kane, L. Schubert, and **E. Hoque**. SOPHIE: Testing a Virtual, Interactive, AI-Augmented End-of-Life Communication Training Tool. *Journal of Pain and Symptom Management 67(5), e794-e795 (abstract)*, 2024.
32. T. Adnan et al.. Unmasking Parkinson's Disease Using Smiles: An AI-Enabled Screening Framework. *Future of Parkinson's Disease Conference, Austin*, 2023. *Best Abstract in Clinical Research*
31. M. Hasan, C. Ozel, S. Potter, and **E. Hoque**. SAPIEN: Affective Virtual Agents Powered by Large Language Models. *ACII Workshops and Demos (ACIIW 2023)*, 2023. Video
30. M. Hasan et al.. Auto-Gait: Automatic Ataxia Risk Assessment with Computer Vision on Gait Task Videos. *International Congress for Ataxia Research (ICAR 2022)*, 2022.
29. E. A. Hartman et al.. A Week in the Life with Parkinson's Disease: A Holistic Overview from Four Digital Technologies. *International Congress of Parkinson's Disease and Movement Disorders (MDS 2022), Madrid*, 2022.
28. P. T. Yang et al.. Analyzing Gait Videos to Identify and Evaluate Spinocerebellar Ataxia Types 1 and 3. *International Congress of Parkinson's Disease and Movement Disorders (MDS 2022), Madrid*, 2022.
27. P. T. Yang et al.. Longitudinal Evaluation of Hypomimia in Individuals with Parkinson's Disease Using a Video Analytics Tool. *International Congress of Parkinson's Disease and Movement Disorders (MDS 2022), Madrid*, 2022.
26. J. Leong, P. Pataranutaporn, Y. Mao, F. Perteneder, **E. Hoque**, J. M. Baker, and P. Maes. Exploring the Use of Real-Time Camera Filters on Embodiment and Creativity. *CHI 2021 Extended Abstracts*, 2021.
25. W. Rahman, S. Mahbub, A. Salekin, M. K. Hasan, and **E. Hoque**. HirePreter: A Framework for Providing Fine-grained Interpretation for Automated Job Interview Analysis. *Workshop on Applied Multimodal Affect Recognition (AMAR), ACII 2021*, 2021.

24. S. Samrose and **E. Hoque**. Quantifying the Intensity of Toxicity for Discussions and Speakers. *Workshop on Applied Multimodal Affect Recognition (AMAR), ACII 2021*, 2021.
23. A. Zaman, B. Zhang, V. Silenzio, **E. Hoque**, and H. Kautz. Individual-level Anxiety Detection and Prediction from Longitudinal YouTube and Google Search Engagement Logs. *Data for the Wellbeing of Most Vulnerable Workshop, ICWSM 2021*, 2021.
22. A. Chattoraj, R. Acharyya, S. Das, M. I. Tanveer, and **E. Hoque**. Removing Racial Bias in TED Talk Ratings by Awareness of Verbal and Gesture Quality. *Responsible AI Workshop, ICLR 2021*, 2021.
21. **E. Hoque**. Upskilling the Future Workforce Using AI and Affective Computing. *ICMI 2020 Companion (keynote)*, 2020.
20. B. Zhang, A. Zaman, R. Acharyya, **E. Hoque**, V. Silenzio, and H. Kautz. Detecting Individuals with Depressive Disorder from Personal Google Search and YouTube History Logs. *Machine Learning in Public Health Workshop, NeurIPS 2020*, 2020. arXiv
19. M. Zhang, R. Rawassizadeh, **E. Hoque**, and A. Busza. Development of an Electromyographically Controlled Virtual Arm for Poststroke Motor Rehabilitation. *Neurorehabilitation and Neural Repair 32(12), abstract F54*, 2018.
18. M. Zhang, S. Liu, **E. Hoque**, and A. Busza. The Holographic Electromyographic Automated Rehabilitation Technology (HEART) Project. *Neurology 90(15 Suppl.), P5.008*, 2018.
17. A. Singhal, M. R. Ali, R. A. Baten, C. Kurumada, E. Marvin, and **E. Hoque**. Analyzing the Impact of Gender on the Automation of Feedback for Public Speaking. *International Workshop on Human Behavior Understanding (HBU), FG 2018*, 2018.
16. M. R. Ali and **E. Hoque**. Social Skills Training with Virtual Assistant and Real-Time Feedback. *UbiComp 2017 Adjunct*, 2017.
15. M. I. Tanveer and **E. Hoque**. A Google Glass App to Help the Blind with Small Talk. *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2014), Rochester*, 2014.
14. T. K. Sen, M. W. Sinko, A. T. Wilson, and **E. Hoque**. M.I.D.A.S. Touch: Magnetic Interactive Device for Alternative Sight through Touch. *ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2014), Rochester*, 2014.
13. M. Fung, J. Curhan, and **E. Hoque**. Processing Nonverbal Behavior in the Cloud. *Academy of Management Annual Meeting (AOM 2014), Philadelphia*, 2014.
12. **E. Hoque** and R. W. Picard. Automated Coach to Practice Conversations. *Affective Computing and Intelligent Interaction (ACII 2013)*, 2013.
11. **E. Hoque**. My Automated Conversation Helper (MACH): Helping People Improve Social Skills. *ACM International Conference on Multimodal Interaction (ICMI 2012), Doctoral Consortium*, 2012.
10. J. Hernandez*, **E. Hoque***, and R. W. Picard (*equal contribution). Mood Meter: Large-Scale and Long-Term Smile Monitoring System. *ACM SIGGRAPH Emerging Technologies 2012*, 2012. Video
9. **E. Hoque**, D. J. McDuff, L.-P. Morency, and R. W. Picard. Machine Learning for Affective Computing. *Affective Computing and Intelligent Interaction (ACII 2011), Memphis*, 2011.

8. **E. Hoque** and R. W. Picard. I See You: Towards Robust Recognition of Facial Expressions and Speech Prosody in Real Time. *IEEE Computer Vision and Pattern Recognition (CVPR 2010), San Francisco*, 2010.
7. **E. Hoque**, M. Goodwin, R. el Kaliouby, and R. W. Picard. Design and Evaluation of Interactive, Customizable and Extensible Speech Enabled Games as Speech Therapy for Kids with Autism. *International Meeting for Autism Research (IMFAR 2010), Philadelphia*, 2010.
6. P. Robbel, **E. Hoque**, and C. Breazeal. An Integrated Approach to Emotional Speech and Gesture Synthesis in Humanoid Robots. *Workshop on Affective Interaction in Natural Environments (AFFINE), ICMI 2009*, 2009.
5. M. Eckhardt, M. Madsen, Y. Kashef, A. R. Nasser, **E. Hoque**, R. el Kaliouby, M. Goodwin, and R. W. Picard. User-Centered Design of Technology for Just-In-Time, In-Situ Exploration of Facial Affect on the Autism Spectrum. *International Meeting for Autism Research (IMFAR 2009), Chicago*, 2009.
4. M. Madsen, R. el Kaliouby, M. Eckhardt, **E. Hoque**, M. Goodwin, and R. W. Picard. Lessons from Participatory Design with Adolescents on the Autism Spectrum. *ACM CHI 2009, Work-in-Progress, Boston*, 2009.
3. **E. Hoque**. Analysis of Speech Properties of Neurotypicals and Individuals Diagnosed with Autism and Down Syndrome. *ACM ASSETS 2008, Student Research Competition, Halifax*, 2008. *Student Research Competition finalist*
2. **E. Hoque**, M. Yeasin, and M. M. Louwerse. Robust Recognition of Emotion in e-Learning Environment. *18th Annual Student Research Forum, Memphis*, 2006. *Best Poster Award*
1. P. Jeuniaux, M. M. Louwerse, J. Wu, and **E. Hoque**. Embodied Conversational Agents: Multimodal Communication and Embodiment. *Garachico Workshop: Symbols, Embodiment and Meaning, Tenerife*, 2005.

Patents (1)

1. **E. Hoque** and R. W. Picard. Methods and Apparatus for Conversation Coach. *US Patent 9,691,296 B2*, 2016. *Basis for later conversation-coaching products* Video

Theses (2)

2. **E. Hoque**. Computers to Help with Conversations: Affective Framework to Enhance Human Nonverbal Skills. *PhD thesis, MIT Media Lab*, 2013.
1. **E. Hoque**. What Speech Tells Us about Discourse: The Role of Prosodic and Discourse Features in Dialogue Act Classification. *MS thesis, University of Memphis*, 2007.

SELECTED INVITED TALKS

2026 What if Parkinson's Didn't Require a Neurologist to be Detected?. AI for Parkinson's: From Data to Care in an Aging World, American Parkinson Disease Association, Washington, DC.

2026 The Promise Is Local: Arabic-First AI for Autism, Mental Health, and Movement Disorders. 7th International Conference on Disability and Rehabilitation (ICDR 2026), King Salman International Award for Disability Research, Riyadh.

2025 *Keynote* Future of Intelligent Interfaces in Healthcare. Saudi MedTech 2025, Riyadh.

2024 Multimodal AI in Digital Health: Transforming Parkinson's Disease Management. SDAIA Winter AI School.

2024 Artificial Intelligence to Enable Neurological Care Available Anytime, Anywhere. 1st International Conference on Innovations in Parkinson's Disease, Riyadh.

2024 Empowering Patients through AI: Enhancing Communication and Engagement in Neuroscience. The National Academies, Washington, DC.

2024 AI and Machine Learning in Health (panel). KAUST Winter Enrichment Program.

2023 *Keynote* Beyond the Hype: The Prospects and Perils of Generative AI in Healthcare. KAUST Smart Health Initiative Annual Conference.

2023 High-Level Policy Panel on the Three Pillars of the Global Initiative on AI for Health. World Health Organization, Riyadh.

2023 Transforming Autism Care: The Promise of Generative AI in Social Skills Enhancement. Improving Autism Services through Innovation and Integration Conference, Riyadh.

2023 AI to Enable Neurological Care Available Anytime, Anywhere. Department of Neuroscience, King Faisal Specialist Hospital, Riyadh.

2023 AI to Enable Neurological Care Available Anytime, Anywhere. US General Services Administration, Responsible AI event.

2023 APPLE Lecture. Teachers College, Columbia University.

2023 Augmenting Human Touch in Healthcare through AI. KAUST Smart Health Seminar Series.

2022 *Keynote* Should We Deploy Our Research?. International Workshop on Human Behavior Understanding, ICPR 2022.

2022 AI to Aid Doctors in Difficult Conversations with Late-Stage Cancer Patients. National Academy of Medicine, Emerging Leaders Forum.

2022 Advancing Health Equity and Access Using AI. UTSA AI Consortium for Human Well-being. Video

2021 *Keynote* Multimodal Analysis to Ensure Equity and Access in Healthcare. Applied Multimodal Affect Recognition (AMAR), ACII 2021.

2021 AI to Amplify Clinicians' Abilities: End-of-Life Communication, Teleneurology. Roche.

2021 Application of Multimodal Communication in Health and Medicine. Spotify.

2021 Leveraging IoT to Ensure Equity in Aging. MIT IoT Seminar Series.

2021 Ensuring Equity in Aging: Using AI for Parkinson's Disease Treatment and End-of-Life Counseling. Computer Science Colloquium, Johns Hopkins University. Video

2021 Computing to Quantify the Secret Code of Human Activity. EcoHealth Alliance.

2020 *Keynote* Computer Vision to Enable Neurological Care Available Anytime, Anywhere. Face and Gesture Analysis for Health Informatics, ICMI 2020.

2020 *Keynote* Upskilling the Future Workforce Using AI and Affective Computing. Social Affective Multimodal Interaction for Health, ICMI 2020.

2020 *Keynote* Application of Multimodal Communication in Health and Medicine. Grand Challenge and Workshop on Multimodal Language, ACL 2020.

2020 Trustworthy AI. G20 Digital Economy Task Force dialogue.

2020 The Future of Negotiations. Working Conference on AI, Technology and Negotiation, Harvard Law School.

2019 Data, Learning and Education: Role of AI. Transforming Education Conference for Humanity (TECH), UNESCO MGIEP, Visakhapatnam.

2019 Upskilling the Future Workforce Using AI. EU-US Frontiers of Engineering Symposium, National Academy of Engineering, Stockholm.

2019 *Keynote* A Fast Track to New Therapies? New Ways to Monitor Parkinson's in the Real World Using a Computer App. Annual Parkinson's Symposium, Rochester.

2019 AI to Improve Human Ability. Army Research Lab, Adelphi, MD.

2018 *Keynote* Upskilling the Future Workforce through Affective Training. International Conference on Networking, Systems and Security, Bangladesh.

2018 When Can a Computer Improve Your Social Skills?. Goergen Institute for Data Science; SUNY Buffalo.

2017 *Keynote* When Can a Computer Improve Your Social Skills?. Mercer Distinguished Lecture, Rensselaer Polytechnic Institute.

2017 When Can a Computer Improve Your Social Skills?. Society for Affective Science, Boston.

2017 When Can a Computer Improve Your Social Skills?. Carnegie Mellon LTI; Georgia Tech GVU; University of Pennsylvania; RIT.

2016 *Keynote* An Automated Tool to Teach Social Engagement Skills for Older Adults. International Conference on Medical Engineering, Health Informatics and Technology, Dhaka.

2016 Computers to Help with Conversations. EmTech, MIT Technology Review.

2016 When Can a Computer Improve Your Social Skills?. MIT Media Lab Wellbeing Seminar; SUNY Brockport.

2016 Behavior Mining to Model Social Interactions. Cornell University; Affectiva.

2015 *Keynote* Behavior Mining to Model Social Interactions. IEEE International Conference on Intelligent Human-Computer Interaction, Allahabad.

2015 Conversing with Computers to Improve Social Skills. Rochester Science Cafe.

2014 Nonverbal Behavior Processing to Model Social Interactions. US Army Research Lab.

2014	You're Hired: When Emotion Meets Behavioral Health. Departments of Psychiatry and Family Medicine, University of Rochester.
2013	Social Skills Training as a New Assessment Tool. Educational Testing Service (ETS), Princeton.
2013	Computers to Help with Conversations. DARPA, Arlington.
2013	You're Hired: When Emotion Meets Behavioral Health. Microsoft Research; Disney Research; Disney Imagineering; Dartmouth; Stony Brook; UC Berkeley Haas; University of Rochester.
2013	Designing Emotionally Intelligent Systems that Assist. PARC; FXPAL.
2012	Mood Meter: Counting Smiles in the Wild. TEDxNewHaven, Yale University. Video
2012	Exploring Temporal Patterns towards Classifying Frustrated and Delighted Smiles. Stanford; USC; Honda Research.
2011	MIT Mood Meter: A Computer Vision System to Track Mood of the Masses. MIT Brain and Cognitive Sciences.
2009	Computerized Games to Enhance Speech Intelligibility in Children on the Autism Spectrum. Nancy Lurie Marks Family Foundation, Boston.

SERVICE

Policy and national academies

2023 to 2025	Member, Board on Health Sciences Policy, US National Academies of Sciences, Engineering, and Medicine
2024	Bilateral project on climate and health, UK Academy of Medical Sciences and US National Academy of Medicine
2024	Planning Committee, Exploring the Bidirectional Relationship between AI and Neuroscience, National Academies workshop
2023	Chair, Emerging Leaders in Health and Medicine Scholars Forum, National Academy of Medicine
2023	Panelist, High-Level Policy Panel, WHO Global Initiative on AI for Health, Riyadh
2020	Invited speaker, G20 Digital Economy Task Force dialogue on trustworthy AI
2020 to 2023	Emerging Leader in Health and Medicine, National Academy of Medicine
2015 to 2022	Review panelist, NSF (IIS, SCH) and Army Research Lab

Editorial

2023 to present	Editorial Board, IEEE Pervasive Computing
2017 to present	Associate Editor, Digital Biomarkers
2013 to present	Associate Editor, Journal on Multimodal User Interfaces

2017 to 2020	Associate Editor, Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)
2015 to 2019	Associate Editor, IEEE Transactions on Affective Computing

Conference organizing

2023	General Chair, Affective Computing and Intelligent Interaction (ACII 2023)
2020	Special Session Chair, IEEE FG
2019	Moderator, Workforce of the Future, Microsoft Faculty Summit
2018	Demo Chair, IEEE FG; HCCS Workshop Co-Chair, PerCom
2017	Program Chair, IEEE International Conference on Identity, Security and Behavior Analysis (ISBA)
2017	Best Paper Award Committee, IEEE FG; Demo Chair, ACII
2015	Special Session Chair, ACII
2014	Student Travel Grants Chair, MobiSys; Co-Chair, panel on AI and negotiation, Academy of Management
2011	Co-Chair, Machine Learning for Affective Computing workshop, ACII

Program committees and reviewing

Program committee	AAAI Conference on Artificial Intelligence
Program committee	ACM CHI, ACM UbiComp and ACM IUI
Program committee	IEEE International Conference on Automatic Face and Gesture Recognition (FG)
Program committee	Affective Computing and Intelligent Interaction (ACII)
Reviewer	ACM Transactions on Computer-Human Interaction (TOCHI)
Reviewer	IEEE Transactions on Affective Computing and IEEE Transactions on Multimedia
Reviewer	Speech Communication, Journal of Phonetics and others

University of Rochester

2018 to 2019	Interim Director, Goergen Institute for Data Science
2016 to 2017	Assistant Director of Research Outreach, Goergen Institute for Data Science
Leadership searches	Search committee for the director of the Goergen Institute; review committee for the Dean of the Hajim School of Engineering
Committees	Faculty hiring, graduate admissions, graduate education and AI strategy committees
Department	Computer Science colloquium chair

Memberships

- National Academy of Medicine, Emerging Leader in Health and Medicine (2020 to 2023)
- ACM Future of Computing Academy (inducted 2017)
- AAAI, life and senior member
- ACM, life member; Distinguished Member (2022)
- IEEE (2010 to present)
- American Association for the Advancement of Science (2017 to present)
- Association for the Advancement of Affective Computing (2017 to present)

TEACHING

University of Rochester. Ratings are students' scores for teaching skills, out of 5. Course details, student project videos and evaluations on the Teaching page.

Spring 2023	CSC 260/460: Technology and Climate Change. 10 students; teaching rating 4.9/5. Syllabus
Fall 2022	CSC 212/412: Human-Computer Interaction. 55 students; teaching rating 4.9/5; Human-AI interaction. Course site Student projects
Fall 2021	CSC 260/460: Technology and Climate Change. 16 students; teaching rating 4.8/5; New course. Syllabus
Spring 2021	CSC 212/412: Human-Computer Interaction. 65 students; teaching rating 4.7/5; Bias and fairness. Course site Student projects
Fall 2020	CSC 575: Living During a Pandemic: Can AI Help Mitigate It?. 12 students; teaching rating 4.5/5; New course. Course book Student projects
Spring 2020	CSC 212/412: Human-Computer Interaction. 55 students; teaching rating 4.6/5; AI and ethics. Course site Student projects
Spring 2019	CSC 212/412: Human-Computer Interaction. 65 students; teaching rating 4.0/5; The future of work. Course site Student projects
Fall 2017	CSC 212/412: Human-Computer Interaction. 60 students; teaching rating 4.4/5. Course site Student projects
Fall 2017	CSC 575/576: Intervention Strategies for Health Applications. 11 students; teaching rating 4.1/5; New course. Course site
Spring 2017	CSC 212/412: Human-Computer Interaction. 65 students; teaching rating 4.5/5; New AI prerequisite. Course site Student projects
Spring 2017	CSC 530 / DSC 531: Data-Enabled Research into Human Behavior. 10 students; teaching rating 4.1/5; DSC 531 practicum. Course site
Fall 2015	CSC 212/412: Human-Computer Interaction. 60 students; teaching rating 4.3/5. Course site Student projects
Fall 2015	CSC 530 / DSC 531: Data-Enabled Research into Human Behavior.; CSC 530 methods module. Course site

Spring 2015	CSC 575: Interactive Machine Learning. 12 students; teaching rating 4.2/5; New course. Course site
Fall 2014	CSC 212/412: Human-Computer Interaction. 44 students; teaching rating 4.6/5; New prerequisite. Course site Student projects
Fall 2013	CSC 212/412: Human-Computer Interaction. 48 students; teaching rating 3.2/5; New syllabus. Course site Student projects

MENTORING

PhD graduates

2026  **Md Saiful Islam**, Research Scientist, Google. Google PhD Fellowship 2023-2026

2026  **Masum Hasan**, Founder and CEO, Sentien.io

2025  **Kurtis Haut**, In memoriam. DoD SMART Scholarship 2020-2024

2024  **Benjamin Kane**, Openstream.ai. Co-advised with Lenhart Schubert

2023  **Wasifur Rahman**, Applied Scientist, Amazon. UbiComp Distinguished Paper Award 2020

2022  **Raiyan Abdul Baten**, Assistant Professor of Computer Science, University of South Florida. AAAC Outstanding PhD Dissertation Award

2022  **Kamrul Hasan**, Research Scientist, Google (previously Meta)

2021  **Taylan Sen**, Assistant Professor of Computer Science, Niagara University

2021  **Samiha Samrose**, Apple (previously Read.AI)

2020  **Rafayet Ali**, Research Scientist, Sysco

2020  **Anis Zaman**, Research Scientist, eBay. Co-advised with Henry Kautz

2019  **Iftekhar Tanveer**, Founder and CEO, Shobdo AI (previously Spotify)

Postdoctoral researchers

2024  **Amir Zadeh**, Staff ML Researcher, Lambda

2023  **Raiyan Abdul Baten**, Assistant Professor, University of South Florida

2021  **Rafayet Ali**, Research Scientist, Sysco

2019  **Reza Rawassizadeh**, Associate Professor, Boston University

2016  **Rui Li**, Associate Professor, Rochester Institute of Technology

Current PhD students

Adiba Mahbub Proma · Tariq Adnan · Neeley Pate · Pai Liu · Sooyong Park

Student honors

- Adiba Mahbub Proma: Rising Stars in EECS (2026-27)
- Junjie Zhao: CRA Outstanding Undergraduate Researcher honorable mention (2024); department outstanding researcher award (2026)
- Neeley Pate: finalist, 2026 NCWIT AiC Collegiate Award; Graduate Fellowship for STEM Diversity (2024 to 2027); Provost's Fellowship (2023 to 2025)
- Sammy Potter: CRA Outstanding Undergraduate Researcher honorable mention (2024); department outstanding researcher award (2025)
- Stela Ciko: department outstanding senior award (2025)
- Sangwu Lee and Alex Martin: CRA Outstanding Undergraduate Researcher honorable mentions (2023); department outstanding researcher awards (2024)
- Raiyan Abdul Baten: AAAC Outstanding PhD Dissertation Award (2023)
- Md Saiful Islam: Google PhD Fellowship (2023 to 2026)
- Caleb Wohn: NSF CSGrad4US graduate fellowship (2023)
- Adira Blumenthal: ACII Best Paper Nomination; CRA honorable mention (2022); department outstanding researcher award (2023)
- Dillanie Sumanthiran: ACM Multimedia Best Paper Nomination (2022); department outstanding researcher award (2023)
- Kurtis Haut: Department of Defense SMART Fellowship (2020 to 2024)
- Wasifur Rahman: UbiComp Distinguished Paper Award (2020)
- Melissa Wen: NSF GRFP honorable mention; Phi Beta Kappa (2020)
- Ashely Tenesaca: McNair Fellowship; CRA honorable mentions (2019, 2020)
- Gazi Naven Ahmed: Xerox Fellowship (2018)
- Vivian Li: CRA Outstanding Undergraduate Researcher (2016)
- Sangwu Lee: IOTA book award (2018)
- Shagun Bose: outstanding senior award (2020)
- Minh Tran: department outstanding researcher award; Phi Beta Kappa (2020)
- Boyu Zhang: CRA Outstanding Undergraduate Researcher finalist (2020)
- Jianyuan Zhong: CRA Outstanding Undergraduate Researcher honorable mention
- Luke Gerstner: McNair Fellowship (2018)
- Famous Clark: McNair Fellowship (2016)

- Duy Nguyen: IOTA book award (2016)
- Tergel Purevdorj: valedictorian, Computer Science (2016)
- Luis Nova: Xerox Fellowship (2015)
- Zoe Tiet: Xerox Fellowship (2014)

More than 40 undergraduates, NSF REU students and high-school students have done research in the lab, many as co-authors.

PRESS COVERAGE

Parkinson's screening from speech, smiles and home video

2026	**Spectrum News**, Coverage of our npj Parkinson's Disease paper
2025	**Newsweek**, Smart speakers like Alexa and Google Assistant could tell if you have Parkinson's
2025	**WXXI**, An AI-powered tool analyzes speech to screen for Parkinson's
2025	**University of Rochester**, AI speech-based screening for Parkinson's disease
2025	**Medical Xpress**, Artificial intelligence shows promise in detecting Parkinson's disease
2025	**Parkinson's News Today**, AI speech analysis detects subtle signs of Parkinson's
2025	**Eurasia Review**, Parkinson's diagnosis through AI-driven selfie analysis
2025	**Labroots**, Researchers test AI to detect Parkinson's via selfies
2025	**StudyFinds**, AI-powered selfie analysis may identify Parkinson's symptoms
2025	**Newsweek**, This new test could diagnose Parkinson's with AI (smile videos, NEJM AI)
2025	**News-Medical**, AI-powered, speech-based screening tool offers new hope for early Parkinson's detection
2025	**Futurity**, Speech-based AI tool flags sign of Parkinson's
2025	**StudyFinds**, AI can detect Parkinson's from how you read one sentence
2025	**Hackster.io**, Online speech test detects Parkinson's
2024	**NSF**, PARK highlighted as an innovative use of AI
2023	**University of Rochester**, Online AI-based test for Parkinson's disease severity shows promising results
2023	**EurekAlert! (AAAS)**, Online AI-based test for Parkinson's disease severity shows promising results
2023	**Medical Xpress**, Online AI-based test for Parkinson's disease severity (finger tapping)
2022	**University of Rochester**, Software uses selfies to detect early symptoms of Parkinson's disease
2022	**Neurology Today**, Facial analysis software helps screen for Parkinson's disease
2022	**WXXI**, Unlocking Parkinson's, one selfie at a time

2022 **Futurity**, Can selfie software predict if you'll develop Parkinson's?

2021 **Healio**, Selfies may help identify Parkinson's disease

2021 **Parkinson's News Today**, Video selfies may one day help in diagnosing Parkinson's

SOPHIE and AI training for serious-illness conversations

2026 **University of Rochester**, Team Science: AI helps dentists practice the conversations that matter (URMC)

2022 **Healio**, AI platform enables oncologists to practice conversations with terminally ill patients

2021 **University of Rochester**, A new way to prepare doctors for difficult conversations

2021 **University of Rochester**, Helping doctors with hard conversations (Rochester Review)

2020 **The National Academies**, Decoding the unspoken ways we communicate

Creativity, belief and echo chambers in social networks

2026 **University of Rochester**, Your social media feed is built to agree with you. What if it didn't?

2026 **The University Network**, How a little randomness could break social media echo chambers

2026 **Digital Information World**, Your social media feed is built to agree with you. What if it didn't?

2021 **University of Rochester**, Can social networks help us be more creative?

2020 **Phys.org**, Can social networks help us be more creative?

Deception and credibility

2018 **Newsweek**, How to spot a liar: experts uncover the signs of deception

2018 **The Times**, Facial software knows if you have something to hide

2018 **Daily Mail**, Can you spot the liar?

2018 **University of Rochester**, Using data science to tell which of these people is lying

2018 **WXXI**, UR research on lie detection could help at airports

2018 **IFLScience**, Can you spot the liar in the photo?

2018 **Association of American Universities**, Using data science to tell which of these people is lying

2018 **University of Rochester**, Who's telling the truth? (Rochester Review)

2018 **University of Rochester**, Will data science and smartphone apps predict if you are telling the truth?

2014 **New Scientist**, US government chatbot gets you to tell all

Profiles and recognition

2026 **Penn State**, Fifteen Penn Staters honored as 2026 Alumni Fellows

2026 **MIT Media Lab**, Alum Ehsan Hoque inducted into 2026 class of AIMBE College of Fellows

2026 **University of Rochester**, Ehsan Hoque inducted into AIMBE College of Fellows

2025 **University of Rochester**, Ehsan Hoque named a finalist for the 2025 Norwegian Letten Prize

2025 **University of Rochester**, Three Rochester faculty members receive nation's highest honor for early-career investigators (PECASE)

2025 **Penn State**, Behrend alumni honors: PECASE

2023 **University of Rochester**, Faculty awards: UbiComp 10-Year Impact Award for MACH

2023 **Bigganchinta (Prothom Alo)**, সৌদির এআই ল্যাবের প্রধান গবেষক হলেন এহসান হক (Ehsan Hoque becomes chief scientist of Saudi Arabia's AI lab)

2018 **Computing Community Consortium**, Great Innovative Ideas: ROC HCI

2017 **Science News**, M. Ehsan Hoque develops digital helpers that teach social skills (SN 10: Scientists to Watch)

2017 **University of Rochester**, Ehsan Hoque, among 10 Scientists to Watch, is a study in resiliency

2017 **Penn State**, Behrend graduate M. Ehsan Hoque wins university Alumni Achievement Award

2016 **MIT Technology Review**, Innovators Under 35: practice by talking to a machine first

2016 **EmTech**, Meet the Innovators Under 35: Ehsan Hoque (video)

2016 **Financial Times**, Hail the algorithms that decode human gestures

2016 **University of Rochester**, Ehsan Hoque: MIT Technology Review Innovator Under 35

2012 **The Daily Star**, M. Ehsan Hoque, Researcher (21st Anniversary Supplement profile)

Public speaking, interviews and singing: ROC Speak, Rhema, Vowel Shapes

2016 **Microsoft Research**, Cloud computing changes the way we practice public speaking

2015 **University of Rochester**, Great Scott! It's Back to the Future Day: video glasses

2015 **MIT Technology Review**, Your smartphone can tell if you're bored

2015 **New York Magazine**, Meet the star of TED 2020: a Glass app that coaches you as you talk

2015 **Engadget**, Google Glass app can help socially awkward penguins speak in public

2015 **University of Rochester**, Wearable technology can help with public speaking

2015 **WXXI**, Smart glasses app helps tame the fear of public speaking

2015 **University of Rochester**, Computer science students help singers learn their vowels

2015 **WXXI**, New app for singers and teachers

2014 **Smithsonian**, What if job interviews were automated?

2014 **University of Rochester**, Dancing with computers (Rochester Review)

Sky News, SWIPE: virtual assistance for job interviews (video)

MACH: My Automated Conversation coacH

2013 **MIT News**, Automated 'coach' could help with social interactions (MIT homepage spotlight)

2013 **MIT Technology Review**, Robo-Coach: software helps hone social skills

2013 **New Scientist**, Bag your dream job with a little help from an avatar

2013 **Engadget**, MACH system from MIT can coach those with social anxiety

2013 **Fast Company**, New computer software can help improve social skills

2013 **Huffington Post**, 'My Automated Conversation Coach' is a digital social interaction trainer

2013 **Inc.**, Say goodbye to the taped interview

2013 **Medical Daily**, Virtual conversation coach helps overcome social awkwardness

2013 **CTV**, New online device classes up people with poor social skills (Canada AM)

2013 **Design News**, Video: interview with an avatar

2013 **WGBH**, Could you use a little polish in job interviews? (Boston Public Radio)

2013 **CJAD**, Are you socially awkward? There's an app for that (Montreal radio)

2013 **University of Rochester**, Researcher wins best paper award for automated interview coach

Reading smiles: frustration and delight

2012 **MIT News**, Is that smile real or fake? (MIT homepage spotlight)

2012 **NPR**, What's in a smile? Turns out computers best humans at parsing what's genuine

2012 **Time**, MIT researchers decode your smile

2012 **The Atlantic**, What it means that computers can tell these smiles apart, but you can't

2012 **Wall Street Journal**, How to end the age of inattention

2012 **The Telegraph**, Computers better at spotting fake smiles than humans

2012 **Wired**, MIT's algorithm can spot a fake smile better than a human can

2012 **Wired**, How to understand a smile

2012 **MIT Technology Review**, Software better at detecting frustration than humans

2012 **MIT Technology Review**, Delight or frustration? Tough call

2012 **Popular Science**, Algorithm can tell if your smile is happy or born of frustration

2012 **Daily Mail**, Can you tell a fake smile from a real one?

2012 **Mashable**, New computer algorithm knows your phony smile

2012 **Engadget**, MIT researchers teach computers to recognize your smile, frustration

2012 **BostInno**, If you're faking a smile, the MIT Media Lab knows it

2012 **Fast Company**, How to interpret facial expressions

2012 **Fast Company**, Does your phone know how happy you are? The emotion-recognition industry

MIT Mood Meter

2012 **New Scientist**, Face-reading software to judge the mood of the masses

2011 **Fast Company Design**, Computers scan a crowd, gauging its mood

2011 **BostInno**, Is MIT's Media Lab creating the world's happiness barometer?

2011 **Popular Science**, MIT meter measures the mood of passers-by

2011 **Innovation News Daily**, Mood Meter analyzes happiness of passersby

2011 **PBS NewsHour**, Photo essay: furry robots, and more innovations from MIT's Media Lab

2011 **MIT News**, Smile, MIT! You're on the Mood Meter (The Tech)

2011 **MIT News**, Mood Meter, a creation of the MIT Media Lab (The Tech)

2011 **New Scientist**, Specs that see right through you

Earlier work at MIT

2009 **MIT News**, A phone is not just a phone

2009 **GigaOM**, MIT's NextLab seeks to help developing countries through mobile

2009 **Bright Side of News**, Farmers learn how to beat the market via cell phone

Photography: The Wali Chronicles

2011 **Daily Mail**, Baby that's cute! Loving parents create funny pictures of their four-month-old son