

Kumar Akash, *Ph.D.*

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Kumar Akash is a Principal Scientist at Honda Research Institute USA, Inc. He performs research in the area of human-machine interactions. His research interests include human cognitive state modeling, human behavior signal processing, multimodal machine learning, and the application of these technologies to human-machine interaction. He has published over 45 papers in these fields and has received several patents and awards based on his work. He has been heavily involved in the development of intelligent human-aware systems and his work has been cited more than 916 times by his peers in the field. He obtained his Master's and Ph.D. degrees from Purdue University, West Lafayette, Indiana, and his Bachelor's degree from the Indian Institute of Technology, Delhi. His Ph.D. research was supported by a grant from National Science Foundation and Purdue's Bilsland Dissertation Fellowship.

Professional Experience

1. Honda Research Institute, San Jose, CA, USA

Principal Scientist, Human and Social Science

July 2024–Present

- Lead scientist of the Human Social Science group toward developing cutting-edge technologies that prioritize human interaction and safety.
- Conduct research and development on the topic of computational modeling of human-automation interaction and intelligent and adaptive user-machine interfaces.
- Ideate, create, and implement novel human-machine interaction models based on human cognitive states and design experiments to test the operation of these systems.
- Develop driver state understanding algorithms focusing on human trust, reliance, workload, situational awareness, and engagement and optimize system behavior using machine learning algorithms.
- Contribute to a portfolio of patents, academic publications, and prototypes as well as publish the findings in academic journals and conferences

Senior Scientist, Human-Centered Intelligence

June 2022–July 2024

- Conduct research and development on the topic of computational modeling of human-automation interaction and intelligent and adaptive user-machine interfaces.
- Ideate, create, and implement novel human-machine interaction models based on human cognitive states and design experiments to test the operation of these systems.
- Develop driver state understanding algorithms focusing on human trust, reliance, workload, situational awareness, and engagement and optimize system behavior using machine learning algorithms.
- Contribute to a portfolio of patents, academic publications, and prototypes as well as publish the findings in academic journals and conferences

Scientist, Human-Centered Intelligence

August 2020–June 2022

- Conduct research and development on the topic of computational modeling of human-automation interaction and intelligent and adaptive user-machine interfaces.
- Ideate, create, and implement novel human-machine interaction models based on human cognitive states and design experiments to test the operation of these systems.

- Develop driver state understanding algorithms focusing on human trust, reliance, workload, situational awareness, and engagement and optimize system behavior using machine learning algorithms.
- Contribute to a portfolio of patents, academic publications, and prototypes as well as publish the findings in academic journals and conferences

Research Intern, Adaptive Transparency for Autonomous Driving

May 2019–August 2019

- Analyzed the effects of augmented reality-based transparency cues on driver’s cognitive states using eye-tracking, galvanic skin response, and manual takeover tendencies.
- Developed models to capture the dynamic effects of transparency on driver’s cognitive states.
- Established optimal control policies to improve driving performance by dynamically varying transparency based on driver’s estimated cognitive states.

2. Purdue University, IN, USA

Graduate Research Assistant

Aug 2015–May 2020

Reimagining Human-Machine Interactions through Trust-based Feedback

- Designed multiple human subject studies to analyze human trust and workload behavior during interactions with an automated decision-aid and collected data using in-person experiments as well as using online experiments conducted through Amazon Mechanical Turk.
- Created machine-learning-based and control-oriented models to estimate and predict human trust and workload based on human behavior.
- Developed a classification-based framework to estimate human trust using extracted features from psychophysiological signals including electroencephalogram (EEG) and galvanic skin response (GSR).
- Synthesized optimal control algorithms that enable machines to respond to changes in human trust in real time to improve human-machine collaboration and validated closed-loop performance through human subject experimentation.

Education

Ph.D.	Mechanical Engineering, Purdue University, West Lafayette, IN <i>Specialization:</i> Systems, Measurements & Controls <i>Advisor:</i> Dr. Neera Jain <i>Thesis:</i> Reimagining Human-Machine Interactions through Trust-based Feedback	Aug 2020 <i>GPA:</i> 4.00/4.00
M.S.	Mechanical Engineering, Purdue University, West Lafayette, IN <i>Advisor:</i> Dr. Neera Jain	May 2018 <i>GPA:</i> 3.93/4.00
B.Tech.	Mechanical Engineering, Indian Institute of Technology, Delhi, India <i>Advisor:</i> Dr. Sudipto Mukherjee <i>Thesis:</i> Growth Plate Preserving Intramedullary Nail for Pediatric Patients	May 2015 <i>GPA:</i> 9.09/10.00

Awards and Recognition

- **Honda Top 50 Inventors of 2024**, Jul 2024. Ranked 6th in the top 50 Honda inventors in North America who were ranked according to the number of patent applications Honda filed in 2023 as a direct result of their inventions.
- **Honda Top 50 Inventors of 2023**, Jul 2023. Ranked 6th in the top 50 Honda inventors in North America who were ranked according to the number of patent applications Honda filed in 2022 as a direct result of their inventions.

- **Honda Top 50 Inventors of 2022**, Jul 2022. Ranked 14th in the top 50 Honda inventors in North America who were ranked according to the number of patent applications Honda filed in 2021 as a direct result of their inventions.
- **Best Paper Award**, Oct 2022. Awarded Human Factors and Ergonomics Society’s HPMTG Best Paper Award for the paper on modeling driver’s situational awareness.
- **Bilsland Dissertation Fellowship**, Purdue University, Aug 2019. Awarded by the Dean of the Graduate School to provide support to outstanding Ph.D. candidates in the final year of doctoral degree completion.
- **Batch of Sixty Seven (BOSS) Award**, IIT Delhi, May 2015. Awarded for the best experimental project in mechanical engineering discipline submitted during the session 2014–2015.
- **Summer Undergraduate Research Award**, IIT Delhi, May 2013. Awarded by Industrial Research and Development Unit of IIT Delhi for exceptional research potential displayed at the undergraduate level.

Skills

- Software: MATLAB, Simulink, NI LabVIEW (Real-Time & FPGA), SolidWorks, Unreal Engine
- Languages: Python, C++, JavaScript, LaTeX

Publications

Book Chapter

- B1 Jain, Neera, Tahira Reid, **K. Akash**, Madeleine Yuh, and Jacob Hunter. “Enabling Human-Aware Autonomy Through Cognitive Modeling and Feedback Control.” *Cyber-Physical-Human Systems: Fundamentals and Applications* (2023): 91-124.

Peer Reviewed Articles

- A1 Z. Zahedi, S. Mehrotra, T. Misu, **K. Akash**. “Toward Informed AV Decision-Making: Computational Model of Well-being and Trust in Mobility.” *Proceedings of the Thirty-Fourth International Joint Conference on Artificial Intelligence*. 2025.
- A2 S. Park, Y. Xing, **K. Akash**, T. Misu, S. Mehrotra, L. Boyle. “The Impact of Pedestrian Interactions in Intersections on the Three Levels of Drivers’ Situation Awareness.” *Transportation Research Part F: Traffic Psychology and Behaviour*, 107, 167-180, 2024.
- A3 S. Mehrotra, M. Li, **K. Akash**. “What’s beyond safety? Workshop on promoting well-being for mobility users in future hybrid societies.” In *Adjunct Proceedings of the 16th International Conference on Automotive User Interfaces and Interactive Vehicular Applications*, pp. 253-255. ACM, 2024.
- A4 S. Kim, S. Mehrotra, **K. Akash**, T. Misu, J. Lee. “Prosociality Matters: How Does Prosocial Behavior in Interdependent Situations Influence the Well-being and Cognition of Road Users?.” In *Proceedings of the 16th International Conference on Automotive User Interfaces and Interactive Vehicular Applications*, pp. 395-404. ACM, 2024.
- A5 S. Scott-Sharoni, S. Mehrotra, K. Salubre, M. Song, T. Misu, **K. Akash**. “Can we enhance prosocial behavior? Using post-ride feedback to improve micromobility interactions.” In *Proceedings of the 16th International Conference on Automotive User Interfaces and Interactive Vehicular Applications*, pp. 294-304. ACM, 2024.

- A6 Y. Lee, M. Dong, V. Krishnamoorthy, **K. Akash**, T. Misu, Z. Zheng, G. Huang “Driving aggressively or conservatively? Investigating the effects of automated vehicle interaction type and road event on drivers’ trust and preferred driving style.” *Human factors*, 66(9), 2166-2178, 2024.
- A7 M. Niu, Z. Zheng, **K. Akash**, and T. Misu. “Beyond empirical windowing: An attention-based approach for trust prediction in autonomous vehicles.” In *ICASSP 2024-2024 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pp. 5615-5619, IEEE, 2024.
- A8 Z. Zheng, **K. Akash**, and T. Misu. “DualTake: Predicting Takeovers across Mobilities for Future Personalized Mobility Services.” In *Companion of the 2024 ACM/IEEE International Conference on Human-Robot Interaction*, pp. 1194-1198, 2024.
- A9 V. Chi, S. Mehrotra, T. Misu, and **K. Akash**. “Should I Help a Delivery Robot? Cultivating Prosocial Norms through Observations.” In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*, pp. 1-7, 2024.
- A10 X. Hu, **K. Akash**, S. Mehrotra, T. Misu, and M. Steyvers. “Prosocial Acts Towards AI Shaped By Reciprocation And Awareness.” In *Proceedings of the Annual Meeting of the Cognitive Science Society*, vol. 46, 2023.
- A11 Y. Xing, S. Park, **K. Akash**, T. Misu, and L. Boyle. “The impact of environmental features on drivers’ situation awareness using real-world driving scenarios.” *International Journal of Human-Computer Interaction* 39, no. 16, pp. 3203-3212, 2023.
- A12 M. Li, S. Mehrotra, **K. Akash**, T. Misu, and J. Lee. “You cooperate, i reciprocate: Well-being and trust in automated vehicles.” In *2023 IEEE 26th International Conference on Intelligent Transportation Systems (ITSC)*, pp. 5932-5939. IEEE, 2023.
- A13 S. Mehrotra, Z. Zahedi, T. Misu, and **K. Akash**. “Wellbeing in Future Mobility: Toward AV Policy Design to Increase Wellbeing through Interactions.” In *2023 IEEE 26th International Conference on Intelligent Transportation Systems (ITSC)*, pp. 3275-3282. IEEE, 2023.
- A14 S. Mehrotra, K. Salubre, **K. Akash**, Z.Zheng, and T. Misu. “Does prior experience influence trust in novel automation systems? A study on two mobility platforms.” In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, vol. 67, no. 1, pp. 1678-1685. Sage CA: Los Angeles, CA: SAGE Publications, 2023.
- A15 F. Koochaki, Z. Zheng, **K. Akash**, and T. Misu. “Learn-able Evolution Convolutional Siamese Neural Network for Adaptive Driving Style Preference Prediction.” In *2023 IEEE Intelligent Vehicles Symposium (IV)*, pp. 1-7. IEEE, 2023.
- A16 J. Hunter, E. Ulwelling, M. Konishi, N. Michelini, A. Modali, A. Mendoza, J. Snyder, S. Mehrotra, Z. Zheng, A. Kumar, **K. Akash**, T. Misu, N. Jain, and T. Reid. “The future of mobility-as-a-service: trust transfer across automated mobilities, from road to sidewalk.” *Frontiers in psychology* 14: 1129583, 2023.
- A17 S. Mehrotra, J. Hunter, M. Konishi, **K. Akash**, Z.Zheng, T. Misu, A. Kumar, T. Reid, and N. Jain. Trust in Shared Automated Vehicles: Study on Two Mobility Platforms. No. TRBAM-23-04456, 2023.
- A18 A. Kumar, **K. Akash**, S. Mehrotra, T. Misu, and M. Steyvers. “When Do Drivers Intervene In Autonomous Driving?.” In *Companion of the 2023 ACM/IEEE International Conference on Human-Robot Interaction*, pp. 301-305, 2023.
- A19 Y. Lee, M. Dong, V. Krishnamoorthy, **K. Akash**, T. Misu, Z.Zheng, and G. Huang. “Driving aggressively or conservatively? Investigating the effects of automated vehicle interaction type and road event on drivers’ trust and preferred driving style.” *Human factors*, 2023.

- A20 Z. Zheng, **K. Akash**, T. Misu, V. Krishnamoorthy, M. Dong, Y. Lee, and G. Huang. “Identification of Adaptive Driving Style Preference through Implicit Inputs in SAE L2 Vehicles.” In Proceedings of the 2022 International Conference on Multimodal Interaction, pp. 468-475, 2022.
- A21 Z. Zheng K., **K. Akash**, and T. Misu. “Detection of Perceived Discomfort in SAE L2 Automated Vehicles through Driver Takeovers and Physiological Spikes.” In 2022 IEEE 25th International Conference on Intelligent Transportation Systems (ITSC), pp. 1717-1722. IEEE, 2022.
- A22 Z. Sajedinia, **K. Akash**, Z. Zheng, T. Misu, M. Dong, V. Krishnamoorthy, K. Martinez, K. Sureshbabu, and G. Huang. “Investigating Users’ Preferences in Adaptive Driving Styles for Level 2 Driving Automation.” In Proceedings of the 14th International Conference on Automotive User Interfaces and Interactive Vehicular Applications, pp. 162-170, 2022.
- A23 S. Park, Y. Xing, **K. Akash**, T. Misu, and L. Boyle. “The Impact of Environmental Complexity on Drivers’ Situation Awareness.” In Proceedings of the 14th International Conference on Automotive User Interfaces and Interactive Vehicular Applications, pp. 131-138, 2022.
- A24 N. Du, X. Wu, T. Misu, and **K. Akash**. “A preliminary study of modeling driver situational awareness based on SEEV and ACT-R Models.” In Proceedings of the Human Factors and Ergonomics Society Annual Meeting, vol. 66, no. 1, pp. 1602-1606. Sage CA: Los Angeles, CA: SAGE Publications, 2022.
- A25 Y. Xing, S. Park, **K. Akash**, X. Wu, T. Misu, and L. Boyle. “Investigating the impact of context and environment on driver’s situation awareness.” In Proceedings of the Human Factors and Ergonomics Society Annual Meeting, vol. 66, no. 1, pp. 335-339. Sage CA: Los Angeles, CA: SAGE Publications, 2022.
- A26 J. Hunter, M. Konishi, N. Jain, **K. Akash**, X. Wu, T. Misu, and T. Reid. “The interaction gap: a step toward understanding trust in autonomous vehicles between encounters.” In Proceedings of the Human Factors and Ergonomics Society Annual Meeting, vol. 66, no. 1, pp. 147-151. Sage CA: Los Angeles, CA: SAGE Publications, 2022.
- A27 K. Wang, **K. Akash**, and T. Misu. “Learning Temporally and Semantically Consistent Unpaired Video-to-video Translation Through Pseudo-Supervision From Synthetic Optical Flow.” In Proceedings of the AAAI Conference on Artificial Intelligence, vol. 36, no. 3, pp. 2477-2486, 2022.
- A28 T. Wu, E. Sachdeva, **K. Akash**, X. Wu, T. Misu, and J. Ortiz. “Toward an Adaptive Situational Awareness Support System for Urban Driving.” In 2022 IEEE Intelligent Vehicles Symposium (IV), pp. 1073-1080, IEEE, 2022.
- A29 X. Gao, X. Wu, S. Ho, T. Misu, and **K. Akash**. “Effects of Augmented-Reality-Based Assisting Interfaces on Drivers’ Object-wise Situational Awareness in Highly Autonomous Vehicles.” In 2022 IEEE Intelligent Vehicles Symposium (IV), pp. 563-572, IEEE, 2022.
- A30 Y. Qiu, C. Busso, T. Misu, and **K. Akash**. “Incorporating Gaze Behavior Using Joint Embedding With Scene Context for Driver Takeover Detection.” In ICASSP 2022-2022 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), pp. 4633-4637, IEEE, 2022.
- A31 M. Natarajan, **K. Akash**, and T. Misu. “Toward Adaptive Driving Styles for Automated Driving with Users’ Trust and Preferences.” In 2022 17th ACM/IEEE International Conference on Human-Robot Interaction (HRI), pp. 940-944, IEEE, 2022.
- A32 Y. Lee, M. Dong, V. Krishnamoorthy, **K. Akash**, Z. Zheng, T. Misu, and G. Huang. “The impacts of adaptive driving styles on trust in Level 2 automated vehicles.” In Proceedings of the Human Factors and Ergonomic Society annual meeting, vol. 66, no. 1, pp. 345-345, SAGE Publishing, 2022.

- A33 H. Zhu, T. Misu, S. Martin, X. Wu, and **K. Akash**. “Improving driver situation awareness prediction using human visual sensory and memory mechanism.” In 2021 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), pp. 6210-6216, IEEE, 2021.
- A34 J. Liu, **K. Akash**, T. Misu, and X. Wu. “Clustering human trust dynamics for customized real-time prediction.” In 2021 IEEE international intelligent transportation systems conference (ITSC), pp. 1705-1712, IEEE, 2021.
- A35 N. Faria, C. Merenda, R. Greatbatch, K. Tanous, C. Suga, **K. Akash**, T. Misu, and J. Gabbard. “The effect of augmented reality cues on glance behavior and driver-initiated takeover on SAE Level 2 automated-driving.” In Proceedings of the Human Factors and Ergonomics Society Annual Meeting, vol. 65, no. 1, pp. 1342-1346. Sage CA: Los Angeles, CA: SAGE Publications, 2021.
- A36 **K. Akash**, G. McMahon, T. Reid, and N. Jain. “Human trust-based feedback control: Dynamically varying automation transparency to optimize human-machine interactions.” IEEE Control Systems Magazine 40, no. 6, 98-116, 2020.
- A37 **K. Akash**, N. Jain, and T. Misu. “Toward adaptive trust calibration for level 2 driving automation.” In Proceedings of the 2020 international conference on multimodal interaction, pp. 538-547. 2020.
- A38 G. McMahon, **K. Akash**, T. Reid, and N. Jain. “On modeling human trust in automation: Identifying distinct dynamics through clustering of markovian models.” IFAC-PapersOnLine 53, no. 5, 356-363, 2020.
- A39 **K. Akash**, K. Polson, T. Reid, and N. Jain. “Improving human-machine collaboration through transparency-based feedback–part I: Human trust and workload model.” IFAC-PapersOnLine 51, no. 34, 315-321, 2019.
- A40 **K. Akash**, T. Reid, and N. Jain. “Improving human-machine collaboration through transparency-based feedback–part ii: Control design and synthesis.” IFAC-PapersOnLine 51, no. 34, 322-328, 2019.
- A41 **K. Akash**, W. Hu, N. Jain, and T. Reid. “A classification model for sensing human trust in machines using EEG and GSR.” ACM Transactions on Interactive Intelligent Systems (TiiS) 8, no. 4, 1-20, 2018.
- A42 W. Hu, **K. Akash**, T. Reid, and N. Jain. “Computational modeling of the dynamics of human trust during human–machine interactions.” IEEE Transactions on Human-Machine Systems 49, no. 6, 485-497, 2018.
- A43 **K. Akash**, T. Reid, and N. Jain. “Adaptive probabilistic classification of dynamic processes: A case study on human trust in automation.” In 2018 Annual American Control Conference (ACC), pp. 246-251. IEEE, 2018.
- A44 **K. Akash**, W. Hu, T. Reid, and N. Jain. “Dynamic modeling of trust in human-machine interactions.” In 2017 American Control Conference (ACC), pp. 1542-1548. IEEE, 2017.
- A45 W. Hu, **K. Akash**, N. Jain, and T. Reid. “Real-time sensing of trust in human-machine interactions.” IFAC-PapersOnLine 49, no. 32, 48-53, 2016.
- A46 **K. Akash**, K. Lijesh, V. Chittlangia, and H. Hirani. “Design and implementation of adaptive PID controller for active magnetic bearings.” Technology Letters 1, no. 12, 18-24, 2014.
- A47 V. Chittlangia, K. Lijesh, **K. Akash**, and H. Hirani. “Optimum design of an active magnetic bearing considering the geometric programming.” Technology Letters 1, 23-30, 2014.

Patents

- P1 T. Misu, **K. Akash**, and K. Wang. “System and method for learning temporally consistent video synthesis using fake optical flow.” U.S. Patent 12,154,279, issued November 26, 2024.
- P2 **K. Akash**, T. Misu, X. Wu, and J. Liu. “Systems and methods for clustering human trust dynamics.” U.S. Patent 12,145,599, issued November 19, 2024.
- P3 Z. Zheng, **K. Akash**, and T. Misu. “System and method for detecting a perceived level of driver discomfort in an automated vehicle.” U.S. Patent 12,134,404, issued November 5, 2024.
- P4 **K. Akash**, T. Misu, and X. Wu. “System and method for providing an RNN-based human trust model.” U.S. Patent 12,097,892, issued September 24, 2024.
- P5 M. Natarajan, **K. Akash**, and T. Misu. “Adaptive trust calibration.” U.S. Patent 12,017,679, issued June 25, 2024.
- P6 H. Zhu, T. Misu, S. Martin, X. Wu, and **K. Akash**. “System and method for improving driver situation awareness prediction using human visual sensory and memory mechanism.” U.S. Patent 11,954,921, issued April 9, 2024.
- P7 T. Misu, S. Ho, **K. Akash**, X. Gao, and X. Wu. “System and method for determining object-wise situational awareness.” U.S. Patent 11,745,744, issued September 5, 2023.
- P8 **K. Akash**, and T. Misu. “Human trust calibration for autonomous driving agent of vehicle.” U.S. Patent 11,332,165, issued May 17, 2022.
- P9 T. Misu, S. Mehrotra, Z. Zheng, **K. Akash**. “Trust calibration.” U.S. Patent Application 18/194,767, filed October 3, 2024.
- P10 S. Mehrotra, **K. Akash**, Z. Zheng, T. Misu. “Systems and methods for determining trust across mobility platforms.” U.S. Patent Application 18/178,183, filed September 5, 2024.
- P11 **K. Akash**, T. Misu, and Z. Zheng. “Adaptive Trust Calibration.” U.S. Patent Application 18/077,904, filed June 13, 2024.
- P12 Z. Zheng, T. Misu, and **K. Akash**. “Adaptive driving style.” U.S. Patent Application 17/883,540, filed February 8, 2024.
- P13 T. Misu, and **K. Akash**. “System and method for predicting driver situational awareness.” U.S. Patent Application 17/708,294, filed August 17, 2023.
- P14 T. Wu, E. Sachdeva, **K. Akash**, and T. Misu. “System and method for providing a situational awareness based adaptive driver vehicle interface.” U.S. Patent Application 17/696,232, filed June 29, 2023.
- P15 Y. Qiu, T. Misu, and **K. Akash**. “Operator take-over prediction.” U.S. Patent Application 17/570,573, filed April 6, 2023.
- P16 **K. Akash**, and T. Misu. “Adaptive trust calibration.” U.S. Patent Application 17/344,119, filed December 15, 2022.
- P17 H Zhu, T. Misu, S. Martin, X. Wu, and **K. Akash**. “System and method for improving driver situation awareness prediction using human visual sensory and memory mechanism.” U.S. Patent Application 17/324,453, filed September 1, 2022.
- P18 H. Hirani, **K. Akash**, and H. Gupta, “An Internal Hub Gear Assembly.” Indian Patent 3793/DEL/2015, November 20, 2015. (Published)

Invited Talks

- T1 **K. Akash** and T. Misu, “Wellbeing in future hybrid mobility society.” Are You Happy with AV? The Workshop on User Experience (UX) in AV-Human Interaction, Workshop at IEEE International Conference on Intelligent Transportation Systems (ITSC 2023), Bilbao, Bizkaia, Spain, September 24-28, 2023.
- T2 **K. Akash**, S. Hamlin, L. Kavraki and J. Aigle, “Robotics and Healthcare panel.” IFAC Workshop on Cyber-Physical Human Systems (CPHS), Houston, TX, December 1-2, 2022.
- T3 **K. Akash**, “US Army Virtual Workshop – Manned-Unmanned Teaming: Projected Scientific Breakthroughs in 2026-2031.” Arlington, VA, January 11-20, 2021.
- T4 **K. Akash** and T. Misu, “Toward Adaptive Trust Calibration for Level 2 Driving Automation.” Trust calibration for HAI, Workshop at IEEE Intelligent Vehicles Symposium - IV2021, Nagoya University, Nagoya, Japan, July 11-17, 2021.
- T5 **K. Akash**, T. Reid, and N. Jain, “A Classification Model for Sensing Human Trust in Machines Using EEG and GSR.” ACM Intelligent User Interfaces (IUI) Conference 2019, Los Angeles, CA, March 16-20, 2019.
- T6 **K. Akash**, T. Reid, and N. Jain, “Reimagining Human-Machine Interactions Through Trust-Based Feedback.” Student Lightning Talks, 2019 Southwest Robotics Symposium, Arizona State University, Tempe, AZ, January 24-25, 2019.

Professional Activities

Associate Editor

- IEEE Intelligent Transportation Systems Conference 2024
- IEEE Intelligent Transportation Systems Conference 2025

Journal Reviewer

- IEEE Transactions on Control Systems Technology
- IEEE Transactions on Human-Machine Systems
- IEEE Access
- ACM Transactions on Human-Robot Interaction

Conference Reviewer

- IFAC Conference on Cyber-Physical & Human Systems (CPHS)
- American Control Conference (ACC)
- IEEE Conference on Decision and Control (CDC)
- IEEE Intelligent Transportation Systems Conference (ITSC)
- ACM International Conference on Multimodal Interaction (ICMI)
- IEEE International Conference on Advanced Robotics and Its Social Impacts (ARSO)

Professional Society Memberships

- Association for Computing Machinery (ACM)
- American Society of Mechanical Engineers (ASME)
- Institute of Electrical and Electronics Engineers (IEEE)