Stephen Xia
Assistant Professor
Department of Electrical and Computer Engineering
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PROFESSIONAL EXPERIENCE

Northwestern University
Department of Electrical and Computer Engineering — Evanston, IL, USA
Department of Computer Science (by courtesy)
Assistant Professor — **09/2023 - Present**

University of Cambridge
Department of Computer Science and Technology — Cambridge, UK
Visiting Academic — **07/2025 - 09/2025**

University of California, Berkeley
Department of Electrical Engineering and Computer Sciences — Berkeley, CA, USA
Postdoctoral Scholar — **10/2022 - 08/2023**
Advisor: Dr. Prabal Dutta

IBM Research — Yorktown Heights, NY, USA
Research Intern — **Summer 2020, Summer 2021**

Apple Inc. — Cupertino, CA, USA
CoreMotion Data Engineering Intern — **Summer 2019**

National Instruments — Austin, TX, USA
Software Engineering Intern — **Summer 2015**

Hewlett-Packard — Houston, TX, USA
Technical Software Intern — **Summer 2014**

EDUCATION

Columbia University — New York, NY, USA
Ph.D. Electrical Engineering — **09/2016 - 10/2022**
Advisor: Dr. Xiaofan (Fred) Jiang

Rice University — Houston, TX, USA
B.S. Electrical Engineering — **09/2013 - 05/2016**
University Honors, Eta Kappa Nu

AWARDS

- Northwestern University Searle Fellow 2025-2026
- Best Paper Award - ACM HumanSys 2025
- Best Demo Runner Up - ACM MobiCom 2024
- Best Paper Award - Sensors 2024
- Best Paper Award - ACM BuildSys 2023
- EE Collaborative Research Award - Columbia University 2022
- Best Demo Runner Up - ACM SenSys 2022
- Best Demo Award - ACM SenSys 2021
- Best Demo Award - ACM/IEEE IPSN 2020
- Best Demo Award - ACM/IEEE IoTDI 2018
- Best Presentation Award - IEEE VNC 2018
- Second Place, App Contest - IEEE VNC 2018
- Best Demo Runner Up - ACM SenSys 2016
- Best ECE Senior Design Project 2016 - Rice University

· Best ECE Senior Design Demo 2016 - Rice University

INVITED TALKS

· **Towards Efficient Mobile Systems for Interfacing with Humans and the Physical World**
Nokia Bell Labs (2025), University of Cambridge (2025), University of North Carolina at Chapel Hill (2025)
· **Internet of Things and Sustainability in Built Environments**
Northwestern University (2024-2025)
· **Actuating Humans and Drones for Smarter Spaces**
University of California, San Diego (2024); Northwestern University (2024-2025)
· **Embedded Health at all Scales**
Duke University (2023); Northwestern University (2023)
· **Embedded Intelligence Towards Smarter, Healthier, and Safer Environments**
University of Southern California (2023); Arizona State University (2023); Northwestern University (2023); Purdue University (2023); University of Notre Dame (2023); State University of New York at Buffalo (2023); University of Michigan (2022)
· **Embedded Acoustic Intelligence**
Columbia University (2022-2023)
· **Intelligent Acoustic Wearables for Urban Safety**
IBM T.J. Watson Research Center (2019)
· **Conductive Thread-based Textile Sensing**
Columbia Business School (2018)

PROFESSIONAL ACTIVITIES AND SERVICE

Leadership Roles
· General Co-Chair, ACM HeadSys Workshop 2026 (@MobiSys)
· Technical Program Committee Co-Chair, ACM FMSys Workshop 2026 (@SenSys)
· Technical Program Committee Co-Chair, ACM IASA Workshop 2022 (@MobiSys), 2025 (@MobiCom)
· General Co-Chair, CML-IOT Workshop 2022 (@SenSys)

Organizing Committees
· Student Travel Grant Chair, ACM MobiSys 2024, 2026
· Registration Chair, ACM BuildSys 2025
· Publicity and Publication Chair, HumanSys Workshop 2025 (@SenSys)
· Publicity Co-Chair, HotMobile 2025
· Local Arrangements Chair, IEEE BSN 2024
· Sponsorship Chair, ACM BuildSys 2024
· Publicity Chair, ACM EWSN 2022, 2024
· PhD Forum Chair, ACM SenSys 2023
· Publicity Chair, ACM/IEEE IPSN 2023
· Publicity Chair, ACM BuildSys 2021
· Web Chair, IEEE/ACM CHASE 2020
· Web Chair, ACM SenSys 2019

Editorial
· Associate Editor, IEEE Pervasive Computing, 2025 - Present
· Guest Editor, IEEE Internet Computing Magazine - Special Issue on Wearable Computing, 2025 - Present
· Guest Editor, Sensors - Special Issue on State of the Art in Wearable Sensors for Health Monitoring, 2025 - Present

Conference Technical Program Committees
· ACM SenSys 2022, 2024, 2025, 2026
· ACM BuildSys 2023, 2024, 2025, 2026
· IEEE ICPADS 2025

· EWSN 2024
· ACM/IEEE ICCPS 2024
· ACM WWW 2023, 2025
· IEEE ICDCS 2023
· IEEE/ACM CHASE 2020, 2021

Reviewer
· ACM Transactions on Internet of Things (TIOT) - Distinguished Reviewer
· ACM Transactions on Sensor Networks (TOSN)
· IEEE Transactions on Mobile Computing (TMC)
· ACM Transactions on Cyber-Physical Systems (TCPS)
· ACM Transactions on Intelligent Systems and Networks (TIST)
· ACM IMWUT
· IEEE Internet of Things Journal
· ACM SIGEnergy EIR Newsletter
· ACM MobiSys
· ACM MobiCom
· IEEE SMARTCOMP
· ACM e-Energy
· ACM/IEEE IoTDI
· ACM/IEEE IPSN

Grant Proposal Review Panel
· NSF CISE CNS/CSR

Department, School, and University Committees
· Co-Chair, ECE Department Seminar Series (09/2024 - present)

Professional Organization Membership
· Senior Member, Institute of Electrical and Electronics Engineers (IEEE)
· Member, Association for Computing Machinery (ACM)

Ph.D. Dissertation Committees
· Qiankai Cao, Ph.D. Computer Engineering, Northwestern University, Present.
· Anthony Goeckner, Ph.D. Computer Engineering, Northwestern University, Present.
· Payal Mohapatra, Ph.D. Computer Engineering, Northwestern University, Present.
· Zhiwei Zhong, Ph.D. Computer Engineering, Northwestern University, Present.
· Boyang Wei, Ph.D. Computer Science, Northwestern University, Present.
· Qinjie Lin, Ph.D. Computer Science, Northwestern University, Dec. 2025.
· Stefany Cruz, Ph.D. Computer Engineering, Northwestern University, May 2025.

M.S. Dissertations Advised
· Yuxuan Li, M.S. Electrical Engineering, May 2025.
· Lijia Jiang, M.S. Computer Engineering, May 2025.
· Suet Ching Luk, M.S. Computer Engineering, May 2025.
· Rui Wei, M.S. Computer Engineering, May 2025.
· Xiaoyuan Zhang, M.S. Computer Engineering, May 2025.
· Yiting Zhang, M.S. Computer Engineering, May 2025.
· Nan Zhou, M.S. Computer Engineering, May 2025.
· Jiayi Xu, M.S. Computer Engineering, Dec. 2024.
· Yueyuan Sui, M.S. Electrical Engineering, May 2024.

TEACHING AND OUTREACH

Northwestern University

- CE 365/465: Internet of Things Sensors, Systems, and Applications — Fall 2025
- CE 395/495: Embedded Artificial Intelligence — Spring 2024, 2025
- CE 346: Microprocessor System Design — Winter 2024, 2025, 2026
- EE/CE 495: Ph.D. Life Skills — Fall 2024

Columbia University
Teaching Assistant

- EECS E6765: Internet of Things - Systems and Physical Data Analytics — Spring 2017, Spring 2018
- EECS E4764: IoT - Intelligent and Connected Systems — Fall 2016, Fall 2017

Rice University
Course Assistant

- ELEC 327 - Digital Systems Laboratory — Spring 2016
- Discrete Time Signals and Systems on edX — Spring 2015
- Fundamentals of Electrical Engineering on edX — Spring 2014

Outreach and Other Activities

- **Girls Science Day - Women in Science at Columbia** — 2019 - 2023
  Hosted a series (4+) of workshops for female middle school students teaching them the physics of acoustic + wireless signals and how to build sensing and artificial intelligence systems to improve our physical and daily lives.
- **Graduate Students of Electrical Engineering at Columbia (GEEC)** — 07/2018 - 01/2020
  Secretary and Founding Member
  GEEC is the graduate student government for Electrical Engineering at Columbia University dedicated to helping EE/CE graduate students academically, socially, and professionally.
- **Society of Women Engineers Workshops** — 2017, 2018
  Hosted two workshops teaching female high school students about the properties of acoustic signals.

PH.D. STUDENTS

Yueyuan Sui, 09/2024 - Present
[Best Computer Engineering M.S. Thesis Award - 2024]

Junxi Xia, 09/2024 - Present

Weisi Yang, 09/2024 - Present

PUBLICATIONS

*Bolded names are students I supervise at Northwestern. Stars denote equal supervision and contribution.

Refereed Conference Publications

- **Li, Y.**, Gao, Y., Yang, N., & Xia, S., (2026). TW-CRL: Time-Weighted Contrastive Reward Learning for Efficient Inverse Reinforcement Learning. In *40th Annual AAAI Conference on Artificial Intelligence (AAAI 2026).*
  [Oral]
- Mohapatra, P., **Sui, Y.**, Pandey, A., Xia, S., & Zhu, Q., (2025). MAESTRO: Adaptive Sparse Attention and Robust Learning for Multimodal Dynamic Time Series. In *39th Annual Conference on Neural Information Processing Systems (NeurIPS 2025).*
  [Spotlight]
- **Zhao, M.***, **Xia, J.***, Hou, K., Y. Liu, Xia, S.* & Jiang, X.*, (2025). FlexiFly: Interfacing the Physical World with Foundation Models Empowered by Reconfigurable Drone Systems. In *23rd ACM Conference on Embedded Networked Sensor Systems (SenSys 2025).* ACM.
- Xia, S., Wei, P., Liu, Y., Sonta, A., & Jiang, X., (2023). RECA: A Multi-Task Deep Reinforcement Learning-Based Recommender System for Co-Optimizing Energy, Comfort and Air Quality in Commercial Buildings. In *Proceedings of the 10th ACM International Conference on Systems for Energy-Efficient Buildings, Cities, and Transportation (BuildSys*

2023). ACM.
[Best Paper Award]

- Xia, S., Zhao, M., Adhivarahan, C., Hou, K., Chen, Y., Nie, J., Wu, E., Dantu, K., & Jiang, X., (2023). Anemoi: A Low-cost Sensorless Indoor Drone System for Automatic Mapping of 3D Airflow Fields. In *Proceedings of the 29th Annual International Conference on Mobile Computing and Networking (MobiCom 2023)*. ACM.
- Nie, J., Xia, S., Liu, Y., Ding, S., Hu, L., Zhao, M., Fan, Y., Abdel-Aty, M., Preindl, M., & Jiang, X., (2023). A Data-Driven and Human-Centric EV Charging Recommendation System at City-Scale. In *Proceedings of the 14th ACM International Conference on Future Energy Systems (e-Energy 2023)*. ACM.
- Hou, K., Xia, S., Bejerano, E., Wu, J., & Jiang, X., (2023). ARSteth: Enabling Home Self-Screening with AR-Assisted Intelligent Stethoscopes. In *Proceedings of the 22nd International Conference on Information Processing in Sensor Networks (IPSN 2023)*. ACM/IEEE.
- Zhao, M., Xia, S., Nie, J., Hou, K., Dhupar, A., & Jiang, X., (2023). LegoSENSE: An Open and Modular Sensing Platform for Rapidly-Deployable IoT Applications. In *2023 IEEE/ACM Eighth International Conference on Internet-of-Things Design and Implementation (IoTDI 2023)*. ACM/IEEE.
- Xia, S. & Jiang, X., (2022). AvA: An Adaptive Audio Filtering Architecture for Enhancing Mobile, Embedded, and Cyber-Physical Systems. In *Proceedings of the 21st International Conference on Information Processing in Sensor Networks (IPSN 2022)*. ACM/IEEE.
- Hou, K., Liu, Y., Wei, P., Yang, C., Kang, H., Xia, S., Spada, T., Rundle, A., & Jiang, X., (2022). A Low-Cost In-situ System for Continuous Multi-Person Fever Screening. In *Proceedings of the 21st International Conference on Information Processing in Sensor Networks (IPSN 2022)*. ACM/IEEE.
- Liu, Y., Nie, J., Xia, S., Sun, J., Wei, P., & Jiang, X., (2022). SoFIT: Self-Orienting Camera Network for Floor Mapping and Indoor Tracking. In *18th International Conference on Distributed Computing in Sensor Systems (DCOSS 2022)*. IEEE.
- Xia, S., Nie, J., & Jiang, X., (2021). CSafe: An Intelligent Audio Wearable Platform for Improving Construction Worker Safety in Urban Environments. In *Proceedings of the 20th International Conference on Information Processing in Sensor Networks (IPSN 2021)*. ACM/IEEE.
- Nie, J., Hu, Y., Wang, Y., Xia, S., & Jiang, X., (2020). SPIDERS: Low-Cost Wireless Glasses for Continuous In-Situ Bio-Signal Acquisition and Emotion Recognition. In *2020 IEEE/ACM Fifth International Conference on Internet-of-Things Design and Implementation (IoTDI 2020)*. ACM/IEEE.
- Wei, P., Xia, S., & Jiang, X., (2018). Energy Saving Recommendations and User Location Modeling in Commercial Buildings. In *Proceedings of the 26th Conference on User Modeling, Adaptation and Personalization (UMAP 2018)*. ACM.
- Godoy, D. d., Islam, B., Xia, S., Islam, M. T., Chandrasekaran, R., Chen, Y., Nirjon, S., Kinget, P. R., & Jiang, X., (2018). PAWS: A Wearable Acoustic System for Pedestrian Safety. In *2018 IEEE/ACM Third International Conference on Internet-of-Things Design and Implementation (IoTDI 2018)*. ACM/IEEE.
- Wei, P., Chen, X., Vega, J., Xia, S., Chandrasekaran, R., & Jiang, X., (2017). ePrints: A Real-Time and Scalable System for Fair Apportionment and Tracking of Personal Energy Footprints in Commercial Buildings. In *Proceedings of the 4th ACM International Conference on Systems for Energy-Efficient Built Environments (BuildSys 2017)*. ACM.
[Best Paper - Runner Up Award]

Refereed Journal Publications

- **Zhao, M.***, **Xia, J.***, Hou, K., Y. Liu, Xia, S.* & Jiang, X.*, (2025). EmbodiedFly: Embodied LLM Agent with an Autonomous Reconfigurable Drone. In *ACM Transactions on Internet of Things (TIOT)*. ACM.
- **Sui, Y.**, **Zhao, M.**, **Xia, J.**, Jiang, X., & Xia, S., (2024). TRAMBA: A Hybrid Transformer and Mamba Architecture for Practical Audio and Bone Conduction Speech Super Resolution and Enhancement on Mobile and Wearable Platforms. In *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*. ACM.
- Xia, S., Wei, P., Liu, Y., Sonta, A., & Jiang, X., (2024). A Multi-Task Deep Reinforcement Learning-Based Recommender System for Co-Optimizing Energy, Comfort, and Air Quality in Commercial Buildings with Humans-in-the-Loop. In *Data-Centric Engineering (DCE)*. Cambridge University Press.
- Liu, Y., Xia, S., Nie, J., Wei, P., Shu, Z., Chang, J. A., & Jiang, X., (2022). aiMSE: Toward an AI-Based Online Mental Status Examination. In *IEEE Pervasive Computing*. IEEE.
- Zhang S., Li Y., Zhang S., Shahabi F., Xia, S., Deng, Y., & Alshurafa, N., (2022). Deep Learning in Human Activity Recognition with Wearable Sensors: A Review on Advances. In *Sensors*. MDPI.
[Best Paper Award]

- Nie, J., Liu, Y., Hu, Y., Wang, Y., Xia, S., Preindl, M., & Jiang, X., (2021). SPIDERS+: A light-weight, wireless, and low-cost glasses-based wearable platform for emotion sensing and bio-signal acquisition. In *Pervasive and Mobile Computing*. Elsevier.
- Wei, P., Xia, S., Chen, R., Qian, J., Li, C., & Jiang, X., (2020). A Deep-Reinforcement-Learning-Based Recommender System for Occupant-Driven Energy Optimization in Commercial Buildings. In *Internet of Things Journal*. IEEE.
- Xia, S., Godoy, D. d., Islam, B., Islam, M. T., Nirjon, S., Kinget, P. R., & Jiang, X., (2019). Improving Pedestrian Safety in Cities Using Intelligent Wearable Systems. In *Internet of Things Journal*. IEEE.
- Jia, J., Yu, J., Hanumesh, R. S., Xia, S., Wei, P., Choi, H., & Jiang, X., (2018). Intelligent and privacy-preserving medication adherence system. In *Smart Health*. Elsevier.
- Xia, S., Wei, P., Vega, J. M., & Jiang, X., (2018). SPINDLES+: An adaptive and personalized system for leg shake detection. In *SmartHealth*. Elsevier.
- Wei, P., Chen, X., Vega, J. M., Xia, S., Chandrasekaran, R., & Jiang, X., (2018). A Scalable System for Apportionment and Tracking of Energy Footprints in Commercial Buildings. In *Transactions on Sensor Networks*. ACM.
- Jia, J., Xu, C., Pan, S., Xia, S., Wei, P., Noh, H. Y., Zhang, P., & Jiang, X., (2018). Conductive Thread-Based Textile Sensor for Continuous Perspiration Level Monitoring. In *Sensors*. MDPI.

Refereed Workshop and Conference Demo/Poster Publications

- **Zhang, Y.**, **Sui, Y.**, **Xia, J.**, **Yang, W.**, Liu, Y., & Xia, S., (2025). IMUSteth: On-Body Stethoscope Localization with Inertial Sensing for Home Self-Screening. In *3rd International Workshop on Intelligent Acoustic Systems and Applications (IASA 2025)*. ACM.
- **Sui, Y.**, **Zhang, Y.**, Liu, Y., Zhao, M., Hou, K., Nie, J., Jiang, X., & Xia, S., (2025). DomAIn: Towards Programless Smart Homes. In *3rd International Workshop on Human-Centered Sensing, Modeling, and Intelligent Systems (HumanSys 2025)*. ACM.
  [Best Paper Award]
- **Yang, W.**, **Sui, Y.**, **Zhang, Y.**, & Xia, S., (2025). Unsupervised Deep Clustering for Human Behavior Understanding. In *3rd International Workshop on Human-Centered Sensing, Modeling, and Intelligent Systems (HumanSys 2025)*. ACM.
- **Sui, Y.**, **Zhao, M.**, **Xia, J.**, **Zhang, Y.**, Jiang, X., & Xia, S., (2025). DUal-NET: A Transformer-Based U-Net Model for Denoising Bone Conduction Speech. In *3rd International Workshop on Human-Centered Sensing, Modeling, and Intelligent Systems (HumanSys 2025)*. ACM.
- **Zhao, M.**, Hou, K., **Xia, J.**, , Xia, S. & Jiang, X., (2024). Connecting Foundation Models with the Physical World using Reconfigurable Drone Agents. Demo Abstract. In *Proceedings of the 30th Annual International Conference on Mobile Computing and Networking (MobiCom 2024)*. ACM.
  [Best Demo - Runner Up Award]
- **Sui, Y.**, **Zhao, M.**, **Xia, J.**, Jiang, X., & Xia, S., (2024). TraMSR: Transformer and Mamba based Practical Speech Super-Resolution for Mobile Wearables. Poster Abstract. In *Proceedings of the 30th Annual International Conference on Mobile Computing and Networking (MobiCom 2024)*. ACM.
- Xuan, Z., Liu, M., Nie, J., Zhao, M., Xia, S., & Jiang, X., (2023). CaNRun: Non-Contact, Acoustic-based Cadence Estimation on Treadmills using Smartphones. In *Proceedings of Cyber-Physical Systems and Internet of Things Week 2023 (CPS-IoT Week 2023)*. ACM/IEEE.
- Nie, J., Zhao, M., Xia, S., Sun, X., Shao, H., Fan, Y., Preindl, M., & Jiang, X., (2022). AI Therapist for Daily Functioning Assessment and Intervention using Smart Home Devices. In *Proceedings of the 20th ACM Conference on Embedded Networked Sensor Systems (SenSys 2022)*. ACM.
  [Best Demo - Runner Up Award]
- Hou, K., Xia, S., Bejerano, E., & Jiang, X., (2022). AI Stethoscope for Home Self-Diagnosis with AR Guidance. In *Proceedings of the 20th ACM Conference on Embedded Networked Sensor Systems (SenSys 2022)*. ACM.
- Hou, K., Xia, S., & Jiang, X., (2022). BuMA: Non-Intrusive Breathing Detection using Microphone Array. In *Proceedings of the 1st ACM International Workshop on Intelligent Acoustic Systems and Applications (IASA 2022)*. ACM.
- Nie, J., Shao, H., Zhao, M., Xia, S., Preindl, M., & Jiang, X., (2022). Conversational AI Therapist for Daily Function Screening in Home Environments. In *Proceedings of the 1st ACM International Workshop on Intelligent Acoustic Systems and Applications (IASA 2022)*. ACM.
- Liu, Y., Zhao, M., Xia, S., Wu, E., & Jiang, X., (2022). A Sensorless Drone-based System for Mapping Indoor 3D Airflow Gradients: Demo Abstract. In *Proceedings of the 20th Annual International Conference on Mobile Systems, Applications and Services (MobiSys 2022)*. ACM.

- Zhao, M., Liu, Y., Dhupar, A., Hou, K., Xia, S., & Jiang, X., (2022). A Modular and Reconfigurable Sensing and Actuation Platform for Smarter Environments and Drones: Demo Abstract. In *Proceedings of the 20th Annual International Conference on Mobile Systems, Applications and Services (MobiSys 2022)*. ACM.
- Xia, S., Chandrasekaran, R., Liu Y., Yang C., Rosing T. S., & Jiang, X., (2021). Demo Abstract: A Drone-based System for Intelligent and Autonomous Homes. In *Proceedings of the 19th ACM Conference on Embedded Networked Sensor Systems (SenSys 2021)*. ACM.
  [Best Demo Award]
- Xia, S. & Jiang, X., (2021). Improving Acoustic Detection and Classification in Mobile and Embedded Platforms: Poster Abstract. In *Proceedings of the 20th International Conference on Information Processing in Sensor Networks (IPSN 2021)*. ACM/IEEE.
- Xia, S. & Jiang, X., (2020). PAMS: Improving Privacy in Audio-Based Mobile Systems. In *Proceedings of the 2nd International Workshop on Challenges in Artificial Intelligence and Machine Learning for Internet of Things (AIChallengeIoT 2020)*. ACM.
- Hu, Y., Nie, J., Wang, Y., Xia, S., & Jiang, X., (2020). Demo Abstract: Wireless Glasses for Non-contact Facial Expression Monitoring. In *2020 19th ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN 2020)*. ACM/IEEE.
  [Best Demo Award]
- Xia, S., Godoy, D. d., Islam, B., Islam, M. T., Nirjon, S., Kinget, P. R., & Jiang, X., (2018). A Smartphone-Based System for Improving Pedestrian Safety. In *2018 IEEE Vehicular Networking Conference (VNC 2018)*. IEEE.
  [Best Presentation Award][Runner-Up Best App]
- Jia, J., Xu, C., Pan, S., Xia, S., Wei, P., Noh, H. Y., Zhang, P., & Jiang, X., (2018). Moisture Based Perspiration Level Estimation. In *Proceedings of the 2018 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2018 ACM International Symposium on Wearable Computers (UbiComp 2018)*. ACM.
- Godoy, D. d., Xia, S., Fernandez, W. P., Jiang, X., & Kinget, P. R., (2018). Demo Abstract: An Ultra-Low-Power Custom Integrated Circuit based Sound-Source Localization System. In *2018 IEEE/ACM Third International Conference on Internet-of-Things Design and Implementation (IoTDI 2018)*. ACM/IEEE.
  [Best Demo Award]
- Xia, S., Lu, Y., Wei, P., & Jiang, X., (2017). SPINDLES: A Smartphone Platform for Intelligent Detection and Notification of Leg Shaking. In *Proceedings of the 2017 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2017 ACM International Symposium on Wearable Computers (UbiComp 2017)*. ACM.
- Chandrasekaran, R., Godoy, D. d., Xia, S., Islam, M. T., Islam, B., Nirjon, S., Kinget, P., & Jiang, X., (2016). SEUS: A Wearable Multi-Channel Acoustic Headset Platform to Improve Pedestrian Safety: Demo Abstract. In *Proceedings of the 14th ACM Conference on Embedded Network Sensor Systems CD-ROM (SenSys 2016)*. ACM.
  [Best Demo - Runner Up Award]

NEWS AND MEDIA HIGHLIGHTS

Northwestern McCormick School of Engineering 2024 - Improving Acoustic and Bone Conduction Speech Enhancement

EurekAlert! 2022 - Cheaper, faster, safer way to screen temperatures

New York Post 2019 - Smart headphones could save pedestrians from being hit by cars

IEEE Spectrum 2019 - AI System Warns Pedestrians Wearing Headphones About Passing Cars

Fast Company 2019 - These headphones aren't pretty, but they just might save your life

Mashable 2019 - Headphones designed to save your life from reckless drivers

Gizmodo 2019 - These Noise-Canceling Headphones Will Alert You to All the Dangers You Can't Hear

The Telegraph 2019 - 'Smart' headphones designed to save pedestrian lives

Engineering.com 2019 - This Intelligent Headphone System Could Potentially Minimize Pedestrian Deaths

India Times 2019 - Researchers Build Headphones That Alerts You While Walking, May Save You From Deadly Accidents

IEEE Signal Processing Magazine 2018 - Signal Processing Supports a New Wave of Audio Research