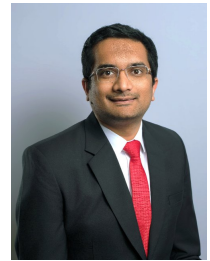


N.J. Myers
Team Nitin Myers



Research profile

My research focuses on robust signal processing and data-driven optimization for communication and sensing systems. Through the development of advanced signal processing techniques and optimization methods, I strive to push the boundaries of these systems, enhancing their efficiency and reliability in dynamic environments.

Qualifications

Doctorate, Millimeter wave link configuration robust to radio frequency impairments, The University of Texas at Austin
15 Jan 2017 → 20 Aug 2020
Award Date: 20 Aug 2020

Bachelor's degree, Indian Institute of Technology Madras
31 Jul 2011 → 15 May 2016
Award Date: 15 May 2016

Prizes

Best Lecturer, 2nd year BSc- Mechanical Engineering
Myers, N. J. (Recipient), 31 Jul 2022

Co-author, Best Student Paper Award, IEEE SPAWC 2022
Myers, N. J. (Recipient), 5 Jul 2022

Finalist, Best Live Demo Award - IEEE Sensors 2024
Myers, N. J. (Recipient), 31 Oct 2024

Graduate School Continuing Fellowship, UT Austin
Myers, N. J. (Recipient), 31 Jul 2019

IDEA League Fellowship
Myers, N. J. (Recipient), 1 Sept 2025

IEEE IMS Faculty Course Development Award, IEEE I2MTC 2026
Myers, N. J. (Recipient), 27 May 2026

Silver Medal, Institute Merit Prize
Myers, N. J. (Recipient), 21 Apr 2016

Employment

Team Nitin Myers
Delft University of Technology
1 Apr 2021 → 23 Aug 2061

Research outputs

Automotive Radar Super-Resolution Sensing with Deep Camera Fusion

Rees, L., Alkanat, T., Myers, N. J. & Pandharipande, A., 2026, In: IEEE Sensors Journal. 26, 5, p. 7838-7846 9 p.

Camera-aided Binary Prior Support Informed Occupancy Grid Mapping

Zhai, P., Joseph, G., Myers, N. J. & Pandharipande, A., 2026, In: IEEE Sensors Journal. 26, 3, p. 4340-4348 9 p.

Compressive Spatial Channel Estimation Under IQ Imbalance

Masoumi, H. & Myers, N. J., 2026, *Proceedings of the ICASSP 2026 - 2026 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*. IEEE, p. 21511-21515 5 p.

Energy-Efficient Sequential Estimation Via Sensor Ordering

Quan, C., Joseph, G. & Myers, N. J., 2026, In: IEEE Transactions on Signal and Information Processing over Networks. 12, p. 614-626 13 p.

In-Sector Direction-of-Arrival Estimation Using a Switched Receive Array

Masoumi, H., Groen, P. B., Kamminga, B. F. J., Hoogland, L. J., van Schaik, B., van der Veen, A. C., Focante, E. & Myers, N. J., 2026, In: IEEE Sensors Letters. 10, 5, 4 p., 7002804.

Message passing-based sparse channel estimation under partially coherent Wiener phase errors

Masoumi, H. & Myers, N. J., 2026, In: IEEE Transactions on Wireless Communications. 25, p. 3928-3943 16 p.

Phaseless Near-Field Localization with Non-Isotropic Receive Antennas

Myers, N. J., Scazzoli, D. & Spagnolini, U., 2026, *Proceedings of the Joint European Conference on Networks and Communications and 6G Summit, EuCNC/6G Summit 2026*. IEEE, p. 846-851 6 p.

Sparse Millimeter Wave Channel Estimation Under Partially Coherent Phase Noise

Quan, C., Yi, W., Myers, N. J. & Joseph, G., 2026, In: IEEE Transactions on Wireless Communications. 25, p. 15961-15976 16 p.

Adaptive Dithering for Improved Dynamic Range in Mixed-Resolution ADC Digital Radars

Shaikh, M. A., Joseph, G., Pandharipande, A. & Myers, N. J., 2025, *Proceedings of the 2025 IEEE Radar Conference, RadarConf 2025*. Rupniewski, M., Blunt, S., Misiurewicz, J., Greco, M. S. & Himed, B. (eds.). IEEE, p. 1242-1247 6 p. (Proceedings of the IEEE Radar Conference).

A Divide-and-conquer Approach for Sparse Recovery in High Dimensions

Bevelander, A., Batselier, K. & Myers, N. J., 2025, *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2025*. Rao, B. D., Trancoso, I., Sharma, G. & Mehta, N. B. (eds.). IEEE, 5 p. (ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings).

An Energy-Efficient Ordered Transmission-based Sequential Estimation

Quan, C., Joseph, G. & Myers, N. J., 2025, *2025 IEEE 101st Vehicular Technology Conference, VTC 2025-Spring 2025 - Proceedings*. New York, NY: IEEE, 6 p. (IEEE Vehicular Technology Conference).

Demo: Driver Gaze-Aware Adaptive LiDAR Sensing for Advanced Driver Assistance Systems

Scari, F., Zgonnikov, A., Quan, C. & Myers, N. J., 2025, *Proceedings of the IEEE 101st Vehicular Technology Conference, VTC 2025-Spring 2025*. IEEE, 2 p. (IEEE Vehicular Technology Conference).

ELLAS: Enhancing LiDAR Perception With Location-Aware Scanning Profile Adaptation

Rhemrev, T., De Jong, E., Van Triest, G., Kalkman, R., Pronk, J., Pandharipande, A. & Jonathan Myers, N., 2025, In: IEEE Sensors Journal. 25, 5, p. 8766-8775 10 p.

Message Passing-Based Sparse Channel Estimation From Partially Coherent Measurement Vectors

Masoumi, H. & Myers, N. J., 2025, *Proceedings of the Joint European Conference on Networks and Communications and 6G Summit, EuCNC/6G Summit 2025*. IEEE, p. 637-642 6 p.

Message Passing-Based Sparse Spatial Channel Estimation Robust to Partially Coherent Phase Noise

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Misdetection Risk-Aware Adaptive LiDAR Sensing for Automotive Driving

Hogendoorn, C., Wosten, R., Zimmerman, M. & Myers, N. J., 2025, *Proceedings of the IEEE 101st Vehicular Technology Conference, VTC 2025-Spring 2025*. IEEE, 5 p. (IEEE Vehicular Technology Conference).

Situation-Aware Dithering for Dynamic Range Enhancement of a Mixed-Resolution ADC in Automotive Radar Receivers

Shaikh, M. A., Joseph, G., Pandharipande, A. & Myers, N. J., 2025, In: *IEEE Transactions on Radar Systems*. 3, p. 1474-1488 15 p.

Situation-aware Space-time Waveform Design for Automotive MIMO Radars

Focante, E., Myers, N. J., Joseph, G. & Pandharipande, A., 2025, *Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2025)*. IEEE, 5 p. (ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings).

Spatial Sparsity-Aware Radar-LiDAR Fusion for Occupancy Grid Mapping in Automotive Driving

Zhai, P., Joseph, G., Myers, N. J., Önen, Ç. & Pandharipande, A., 2025, In: *IEEE Sensors Journal*. 25, 17, p. 33328-33338 11 p.

In-sector Compressive Beam Acquisition for MmWave and THz Radios

Masoumi, H., Verhaegen, M. & Myers, N. J., 2024, In: *IEEE Transactions on Communications*. 73, 4, p. 2752-2768 17 p.

Occupancy Grid Mapping for Automotive Driving Exploiting Clustered Sparsity

Önen, Ç., Pandharipande, A., Joseph, G. & Myers, N. J., 2024, In: *IEEE Sensors Journal*. 24, 7, p. 9240-9250 11 p.

Situation-Aware Adaptive Transmit Beamforming for Automotive Radars

Focante, E., Myers, N. J., Joseph, G. & Pandharipande, A., 2024, *Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2024*. IEEE, p. 8621-8625 5 p. (ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings).

Sparse Millimeter Wave Channel Estimation from Partially Coherent Measurements

Yi, W., Myers, N. J. & Joseph, G., 2024, *Proceedings of the ICC 2024 - IEEE International Conference on Communications*. Valenti, M., Reed, D. & Torres, M. (eds.). IEEE, p. 1897-1902 6 p. (IEEE International Conference on Communications).

Sparsity-Aware Occupancy Grid Mapping for Automotive Driving Using Radar-LiDAR Fusion

Zhai, P., Joseph, G., Myers, N. J., Önen, Ç. & Pandharipande, A., 2024, *2024 IEEE Sensors, SENSORS 2024 - Conference Proceedings*. IEEE, 4 p. (Proceedings of IEEE Sensors).

Analysis of Orthogonal Matching Pursuit for Compressed Sensing in Practical Settings

Masoumi, H., Verhaegen, M. & Myers, N. J., 2023, *Proceedings of the 22nd IEEE Statistical Signal Processing Workshop, SSP 2023*. IEEE, p. 170-174

Circulant Shift-based Beamforming for Secure Communication with Low-resolution Phased Arrays

Patel, K., Myers, N. J. & Heath, R. W., 2023, In: *IEEE Transactions on Wireless Communications*. 22, 4, p. 2295-2310

LiDAR-Based Occupancy Grid Map Estimation Exploiting Spatial Sparsity

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InFocus: A spatial coding technique to mitigate misfocus in near-field LoS beamforming

Myers, N. J. & Heath, R. W., 2022, In: IEEE Transactions on Wireless Communications. 21, 4, p. 2193-2209

Near-field focusing using phased arrays with dynamic polarization control

Myers, N. J., Aslan, Y. & Joseph, G., 2022, *Proceedings of the 30th European Signal Processing Conference (EUSIPCO 2022)*. IEEE, p. 1831-1835

Physical Layer Defense against Eavesdropping Attacks on Low-Resolution Phased Arrays

Patel, K., Myers, N. J. & Heath, R. W., 2022, *Proceedings European Control Conference (ECC) 2022*. IEEE, p. 492-497

Structured Sensing Matrix Design for In-sector Compressed mmWave Channel Estimation

Masoumi, H., Myers, N. J., Leus, G., Wahls, S. & Verhaegen, M., 2022, *Proceedings of the 2022 IEEE 23rd International Workshop on Signal Processing Advances in Wireless Communication (SPAWC)*. IEEE, 5 p. 9833949

Adaptive and Fast Combined Waveform-Beamforming Design for MMWave Automotive Joint Communication-Radar

Kumari, P., Myers, N. J. & Heath, R. W., 2021, In: IEEE Journal on Selected Topics in Signal Processing. 15, 4, p. 996-1012

Learning-aided joint time-frequency channel estimation for 5G new radio

Myers, N. J., Kwon, H., Ding, Y. & Song, K.-B., 2021, *Proceedings of the IEEE Global Communications Conference (GLOBECOM 2021)*. IEEE, 6 p. 9685651