Eric Westervelt

Technology Manager, Controls & Optimization

Eric is a technology manager in the Control and Optimization group at GE Research. His team develops advanced control, optimization, and estimation algorithms that improve the performance and security of industrial assets and systems. Prior to his current role, Eric was a senior engineer in the Controls and Optimization group where he applied his expertise in the application of advanced control algorithms to mechanical systems to bring value and solve system-level problems. Before joining GE Research in 2008, Eric was an assistant professor in the Department of Mechanical Engineering at The Ohio State University where he co-led a robotics lab focused primarily on the design, analysis, and control of legged robots and biomechanical systems.

EDUCATION

- PhD in Electrical Engineering: Systems: Control Theory, University of Michigan, Ann Arbor, MI
- BS summa cum laude in Computer & Systems Engineering, Rensselaer Polytechnic Institute, Troy, NY

RESEARCH AND PROFESSIONAL EXPERIENCE

GE Research
Technology Manager
January 2018 – Present

- Leading team of 30 control and optimization researchers
- Setting and shaping technical direction of team, recruiting, performance development, technical mentorship and guidance, networking internally and externally
- Leading and assurance excellence for all relevant operational rhythms (staffing, financial, safety, compliance)

GE Research
Lead/Senior Engineer
2008 – December 2018

- Contributed to programs for a range of GE businesses: Aircraft Engines, Aviation Systems, Renewables, and Transportation
- Technical program leader for GE Aircraft Engines: Led of numerous R&D programs; member of business design board; collaborative technology road mapping with business; interaction/presentations to senior leadership
- Chair of two large-scale internal meetings: 2014 Control Symposium (300+ attendees) and 2016 Future of Controls Summit (200+ attendees)
- 2012 GER Dushman co-awardee; recipient of many management awards
- 3 patents awarded, 11 patents filed, 2 external publications, and 15 GE internal reports

The Ohio State University
Assistant Professor of Mechanical Engineering
August 2003 – December 2007

- Conducted research in the area of applied control theory; areas of application include robotics, analysis of human gait, hybrid electric vehicle drivelines, and HVAC systems
- Co-founded and directed the Locomotion and Biomechanics Lab
- Published 1 book, 1 book chapter, 12 articles in top-rated peer-reviewed journals and 27 papers in peer-reviewed conferences
- Supervised 13 graduate research assistants (graduated 7) and 7 undergraduate research assistants (4 graduated with honors theses)
- Taught courses at a variety of levels, freshman to advanced graduate; developed 2 new courses
- Served as a peer reviewer for numerous journals and conferences