Biography:
Hello everyone, my name is Anouck Girard, and I am a Professor of Robotics and, by courtesy, of Aerospace Engineering. I have been teaching at Michigan since 2006, almost my entire career.

My research generally focuses on controlling advanced and increasingly autonomous vehicles operating in the space, air, ground and marine domains. Increasing autonomy requires interfacing with human operators, decision making under uncertainty, trajectory planning, and control. These vehicles and vehicle systems exhibit complex nonlinear dynamics, and must function in uncertain environments with limited resources, while satisfying stringent constraints and counteracting the effects of disturbances. Mostly, my collaborators and I have addressed problems of game-theoretic and optimal decision-making, energy and information-aware trajectory optimization, and control of unusual vehicle configurations.

I care strongly about teaching, especially modernizing the undergraduate curriculum and providing high-quality teaching experiences for early (200 and 300 level) courses. I have coauthored one textbook (Fundamentals of Aerospace Navigation and Guidance, with Pierre Kabamba).

My leadership experience includes being the Principal Investigator and Director for the Michigan/AFRL Collaborative Center for Control Sciences (MACCCS, or MAX), from 2008-16, and serving as undergraduate chair for Aerospace Engineering. I am currently leading efforts to reboot the Robotics Institute.

Position Statement:
I would be greatly honored to represent our faculty and serve on the CoE Executive Committee. If elected, I will work to exemplify the Robotics values of Robotics with Respect, Integrity in Action, and Enthusiastic Outreach, enable initiatives for faculty to attract research funding, develop modern curriculum that leverages all available teaching modalities and addresses newer available tools like AI chatbots, and champion outreach. The Executive Committee’s most visible impacts to the faculty are in hiring, promotion and tenure. While I certainly value academic excellence, I believe there are things that can be done to improve the faculty experience to foster and nurture our diverse faculty pool and make the process less stressful. I understand especially well the position of faculty with family responsibilities and will advocate for inclusion and to make improvements to our community and culture.

I look forward to the opportunity to work on the Executive Committee to enhance the experience of all faculty across the College of Engineering.