The Vanderbilt IRIS Initiative
ViA Award, Cycle 2016

What We Do:
• The Vanderbilt IRIS Initiative fosters interdisciplinary research aimed at designing a fully integrated cyber-physical systems strategy to effectively monitor flood protection infrastructure health and provide actionable information to decision makers.
• The initiative includes faculty with expertise in computational mechanics, computer science, field and remote sensing, big data, decision making and transportation systems networks.

Why We Do It:
• The nation’s civil infrastructure is aging and in poor health: the American Society of Civil Engineers assigned it an average grade of D+. In particular, dams received a D grade while roads received a D-.
• There is the need to rethink infrastructure as an intelligent and resilient system that organically interacts with local communities and decision makers in order to function efficiently and effectively.

Who’s Involved?
School of Engineering
Caglar Oskay (PI), Associate Professor, Civil and Environmental Engineering Department
Mark Abkowitz, Professor, Civil and Environmental Engineering Department
Julie Adams, Adjoint Professor, Electrical Engineering and Computer Science Department
Hiba Baroud, Assistant Professor, Civil and Environmental Engineering Department
Craig Philip, Research Professor, Civil and Environmental Engineering Department

College of Arts & Science
Ralf Bennartz, Professor, Department of Earth and Environmental Sciences
Jennifer Trueblood, Associate Professor, Psychological Sciences Department

Trans-Institutional Programs