Torbet McNeil, Diversity Statement

My life experiences have inspired my intellectual inquiry into structural barriers in higher education that influence opportunities and trajectories, and my professional life demonstrates my commitment to promoting diversity, equity, and inclusion. For example, at the University of Arizona (UArizona), I was one of ten students chosen to serve as a Data Science Ambassador through a program administered by the Data Science Institute to increase outreach and communication across campus and improve data science literacy. Likewise, I was a Graduate Assistant for Tutoring Services at the UArizona Think Tank, part of the Division of Student Success & Retention Innovation designed to advance educational equity through supporting first-generation and students from low-income families and historically underserved groups. Additionally, I was previously a mentor for a Pre-Doctoral Diversity Fellow through the Association for Education Finance and Policy and am currently mentoring an undergraduate female student through the Academic Data Science Alliance to promote professional development and increase representation in the field.

One of the main topics I address in my research is how—despite the expectations put forth by the National Academies of Sciences, Engineering, and Medicine—undergraduate data science training falls short in preparing students for the ethical use of data science. I emphasize this finding as a public policy issue. Notably, ethically blind applications of data science may have harmful consequences on historically underrepresented and economically disadvantaged groups. For instance, policing models with built-in data bias can lead to an elevated police presence in historically over-policed neighborhoods. In another example, algorithms used by the U.S. healthcare system are biased in ways that cause Black patients to receive less care than white patients with similar needs. I make recommendations to improve undergraduate data science education and administration, including how to better integrate ethics and offering tracks with fewer prerequisites for higher-level data science application courses to promote inclusivity.

I have taught at universities in Arizona, Colorado, North Carolina, and France; a college in Virginia; and high schools in France and Austria. My classes are inclusive and beneficial learning environments in which diversity is respected. Moreover, I recognize that differences can enhance effectiveness and creativity and facilitate continuous improvement in knowledge, skills, and abilities. It is this type of learning environment that fosters respect, understanding, and social justice. For example, I make great efforts to get all students involved in class discussions, not just the ones who are most comfortable talking. For example, when placing students in small groups prior to a larger class discussion, I go around the class and listen to conversations, paying special attention to generally quieter students. I pick up on interesting comments such students make in small groups and then ask specific questions that connect with their knowledge and get their approval to call on them in the larger discussion. Many perspectives contributed in such instances enrich the course and learning experiences for all.

I create welcoming environments that promote courteous, compassionate, tolerant, and culturally sensitive behavior. I connect with students by including a variety of approaches to teaching and learning and view these experiences as an interactive process that requires adapting to shifting contexts. I continuously reflect on my teaching, closely monitor student progress, and invite feedback.