

Administrative Statement

My professional journey reflects a sustained commitment to integrating scholarship, leadership, and community engagement in ways that advance the mission of urban and metropolitan higher education. As a faculty member and administrator at the University of Houston, I have worked to **develop innovative, research-informed models that connect teaching, service, and applied scholarships** to address real-world challenges. My scholarly contributions are grounded in computing education, experiential learning, and broadening participation in STEM, with a particular emphasis on expanding access and opportunity for underrepresented populations. Through externally funded initiatives, interdisciplinary collaborations, and community-engaged programs, I have sought to build sustainable frameworks that **enhance student success while strengthening the communities** we serve.

Over the course of nearly eleven years as Director of Undergraduate Studies, I have played a central role in shaping curriculum, guiding academic policy, and mentoring thousands of students. This **sustained administrative leadership** has allowed me to influence not only individual student outcomes but also the broader educational experience within the department. My work in this role has been recognized through **multiple awards** in teaching, service, and community engagement, reflecting a consistent commitment to excellence across all dimensions of academic life. These recognitions are not endpoints, but affirmations of a philosophy that prioritizes student success, innovation, and meaningful engagement with the community.

Throughout my career, I have viewed **scholarship not as a separate activity from leadership**, but as its foundation. My research has explored how experiential learning, community engagement, and inclusive pedagogies can transform student outcomes in computing education. This work has informed the design of programs that intentionally **connect classroom learning with practical applications**. For example, I developed the Consulting Clinic, a course model that integrates project-based learning with community partnerships. In this setting, students work directly with nonprofit organizations and small businesses to design and implement technological solutions. This initiative reflects a research-driven approach to teaching and learning, grounded in evidence that experiential education enhances both technical competency and professional readiness. It also demonstrates how scholarships can be translated into scalable, high-impact educational practices.

Central to my professional success has been a leadership philosophy rooted in **collaboration, innovation, and evidence-based decision-making**. I believe that effective leadership requires the ability to build bridges—between disciplines, between institutions and communities, and between theory and practice. By **cultivating partnerships across academia, industry, and the nonprofit sector**, I have been able to lead initiatives that are both impactful and sustainable. My leadership approach prioritizes inclusivity and mentorship, ensuring that students and colleagues are supported in their growth and empowered to contribute meaningfully to their fields. I have consistently worked to create environments where diverse perspectives are valued and where innovation can thrive.

My administrative decisions are guided by a strong commitment to scholarship and inquiry. **I rely on data, assessment, and research findings** to inform program development, resource allocation, and strategic planning. This approach allows me to move beyond anecdotal decision-making and toward intentional, evidence-based leadership. For instance, through support from initiatives such as the Dean's Grant and the Technology Innovation Program (TIP) Grant, I have led efforts to **integrate emerging technologies into the curriculum and to develop data-driven approaches to student success**. These projects not only enhance the quality of education within the institution but also contribute to the broader body of knowledge on effective teaching and learning in computing and STEM disciplines.

A defining feature of my work has been the integration **of scholarship with administrative practice**. I have intentionally aligned my research agenda with my leadership responsibilities, ensuring that each informs and strengthens the other. Initiatives such as the Triangle Project exemplify this integration. By creating a collaborative framework that connects academia, industry, and community organizations, I have developed a model that addresses workforce development while advancing research on cross-sector partnerships. This work highlights how universities can serve as hubs of innovation, bringing together diverse stakeholders to solve complex problems. At the same time, it generates insights that contribute to scholarly discussions on community engagement and applied learning.

My commitment to broadening participation in STEM is reflected in programs such as She Codes, supported in part by the National Science Foundation. This initiative is designed to engage girls and young women in computing through hands-on learning, mentorship, and exposure to real-world applications of technology. The program is grounded in research on inclusive education and has been structured to address barriers to participation in STEM fields. Through She Codes, I have not only impacted individual participants but also contributed to a growing body of work on strategies for increasing diversity in computing. This integration of scholarship and practice underscores my commitment to using research as a tool for social change.

In addition, I am currently leading the **Health Informatics – Global Perspectives Program**, an innovative undergraduate initiative that reflects my commitment to integrating global engagement into computing education. This program is designed to merge computing, healthcare, and international perspectives into a high-impact learning experience. Its objectives are to provide undergraduate students with hands-on exposure to real-world healthcare data systems and technologies, bridge the gap between academic theory and industry practice, develop globally aware and ethically grounded computing professionals, foster interdisciplinary collaboration between computer science and healthcare domains, and prepare students for careers in health informatics, artificial intelligence in healthcare, and data-driven decision-making systems. This initiative represents a forward-looking model of education that responds to global challenges while preparing students for an increasingly interconnected world.

The impact of my work is particularly significant in the context of urban and metropolitan universities. Institutions like the University of Houston serve highly diverse student populations and operate within complex social and economic environments. My efforts

have been focused on **leveraging the unique strengths of such institutions to drive innovation, access, and community engagement**. By aligning academic programs with workforce needs, developing partnerships with local organizations, and creating pathways for underrepresented students to enter STEM fields, I have contributed to the role of the university as an engine of social mobility and economic development.

Through my leadership, I have also worked to **institutionalize practices that support community engagement and experiential learning**. This includes advocating for curriculum redesign, securing funding for innovative programs, and fostering a culture that values applied scholarship. These efforts have helped to create an environment in which faculty and students are encouraged to engage with the community in meaningful ways, and where such engagement is recognized as a vital component of academic excellence.

Beyond my institution, my work has contributed to national and global conversations on the **role of higher education in addressing societal challenges**. Through presentations, collaborations, and program development, I have shared models and practices that can be adapted by other urban universities. My focus on scalability and sustainability ensures that the impact of my work extends beyond a single context, offering frameworks that can be used to enhance education and community engagement more broadly.

In reflecting on my career, I am most proud of the ways in which I have been able to align my **scholarly interests with my leadership responsibilities to create meaningful, lasting impact**. Whether through curriculum innovation, community partnerships, or global initiatives, my work has been guided by a commitment to using scholarship as a tool for transformation. I believe that scholar-administrators have a unique responsibility—and opportunity—to shape the future of higher education by integrating research, leadership, and service in ways that benefit both institutions and society.

In conclusion, my professional and scholarly achievements, leadership approach, and commitment to evidence-based decision-making reflect the core values of **how scholarships can inform and enhance administrative leadership, and how this integration can drive innovation and impact within urban and metropolitan universities**.

Nouhad Rizk