Position Announcement O'Donnell Data Science and Research Computing Institute Office of the Provost Research Faculty in AI/ML

The rapid evolution of machine learning (ML) and artificial intelligence (AI) is reshaping industries and society. A specific research area of SMU's O'Donnell Institute is the development and exploration of generative AI systems. The research faculty in AI/ML will help position SMU as a respected leader in AI/ML. The ODSRCI was recently created to link and enhance data science and AI/ML research across SMU campus, enabled by state-of-the-art HPC infrastructure, including an AI-supercomputer (NVIDIA SuperPOD). In particular, the research scientist in AI/ML will help SMU in advancing generative AI methods that create real-world impact. Collaboration on research projects applying generative AI in diverse areas such as AR/VR technologies, computer vision, urban sciences, and biotechnology is highly encouraged.

The research faculty will design and implement novel, large scale generative AI methods. He/she will collaborate with SMU researchers seeking to scale-up AI/ML applications on HPC platforms. The research faculty will also provide technical mentorship and guidance to students, identify external funding opportunities, assist in preparing multi-disciplinary proposals, and prepare technical reports/papers for publication in journals and conferences.

Required qualifications include a Ph.D. in computer science or related field, a strong knowledge of the theory and practice of generative AI and deep learning, as well as experience in application porting to HPC platforms. Other requirements are excellent programming skills in C or C++ and parallel programming, as well as some rapid prototyping environments such as Python. Knowledge of common machine learning frameworks such as PyTorch is required. Experience with CUDA is a plus.

SMU is a nationally-ranked, private, non-sectarian research institution located in one of the nation's fastest growing metropolitan areas. Research faculty are part of an inclusive and intellectually vibrant community of internationally recognized scholars across the humanities, social sciences, mathematical sciences, engineering, and business. We offer the rare confluence of a comprehensive global research institution and a close-knit intellectual enterprise in the liberal arts tradition.

SMU's Second Century Campaign was the largest fundraising initiative in SMU's history, raising \$1.15 billion by the end of 2015 and a new \$1.5 billion campaign, SMU *Ignited*, has begun. Dallas/Fort Worth Metroplex is a culturally rich arts and global business center and is home to many universities, arts organizations and Fortune 500 corporations. Explore the O'Donnell Data Science and Research Computing Institute at https://www.smu.edu/provost/data-science-institute and SMU at https://www.smu.edu.

Applications must be submitted electronically via Interfolio (http://apply.interfolio.com/143539) and should include a cover letter discussing research interests and projects; a current curriculum *vitae*; and at least two letters of recommendation. To ensure full consideration for the position, the application packet must be received by April 30, 2024 but the committee will continue to accept applications until the position is filled. All applications will be acknowledged. SMU is an equal opportunity employer. We particularly welcome applications from minority and women scholars.

SMU will not discriminate in any employment practice, education program or educational activity on the basis of race, religion, national origin, sex, age, disability, genetic information, veteran status, sexual orientation, or gender identity and expression. SMU's commitment to equal opportunity includes nondiscrimination on the basis of sexual orientation and gender identity and expression. The Executive Director for Access and Equity/Title IX Coordinator is designated to handle inquiries regarding nondiscrimination policies and may be reached at the Perkins Administration Building, Room 204, 6425 Boaz Lane, Dallas, TX 75205, 214-768-3601, accessequity@smu.edu.

Hiring is contingent upon the satisfactory completion of a background check.