### Job Description: Executive Director of the Institute for Data Engineering and Science

The Georgia Institute of Technology (Georgia Tech) is conducting an internal search to fill the Executive Director position for the <u>Institute for Data Engineering and Science</u> (IDEaS). IDEaS, one of Georgia Tech's <u>Interdisciplinary Research Institutes</u> (IRIs), brings together researchers from across Georgia Tech, including academic and research units, to support world-class research, student engagement, and industry, government, and nonprofit collaborations focused on data analytics and science.

Data is ubiquitous and Artificial Intelligence (AI) facilitates the progression from data to knowledge, which underpins Georgia Tech's strategic vision and mission. IDEaS's vision is to define and pursue grand challenges in data science, AI, and computing foundations, and datadriven discovery in scientific fundamentals, engineering and design applications, business analytics, advances in the liberal arts, and other areas. AI has been a disruptive force in science and innovation that has significantly sped up scientific discovery by automating data analysis, generating hypotheses, and enabling impact evaluation and simulations at scales and speeds that were previously impossible. Through interdisciplinary, multi-investigator activities, IDEaS seeks to address the local, national, and global challenges of our time. In pursuit of this vision, IDEaS provides the coordination and expertise necessary to bring together researchers across the Institute, thus strengthening Georgia Tech's position as a leader in big data and AI. The IRI links numerous research centers and efforts in foundational areas such as machine learning, highperformance computing, and algorithms. It also drives research within disciplines such as precision medicine, materials science, energy, and smart cities. IDEaS provides researchers what they need to innovate and pursue challenges on a much bigger scale than would otherwise be possible. IDEaS creates meaningful partnerships between campus, GTRI, and industry labs, while enabling access to world-class research, computing, and data resources and educating future data science leaders. It also addresses long-standing challenges in the world of big data and accelerates research through the innovation stage to industry adoption of big data technologies.

The successful candidate will provide a specific and compelling vision for how to amplify Georgia Tech's position as a nationally and internationally recognized leader in data engineering and science. This individual will enable the success of the IDEaS community by significantly broadening campuswide engagement — including students, IDEaS staff, and faculty, —and engaging internal (e.g., other IRIs, the Georgia Tech Research Institute, and the seven colleges of Georgia Tech) and external partners.

#### **Duties**

The executive director provides intellectual leadership and organizational oversight for IDEaS, building on competencies and relationships that exist across the entire Georgia Tech campus through intentional communication and community building around groundbreaking scientific and engineering challenges. As a service-oriented leader, the executive director will work with

researchers and staff to develop collaborations and initiatives; proactively plan for, initiate and coordinate major research programs to enrich faculty-led research; build communities of interest across campus; cultivate thought leadership; educate key stakeholders and prepare the future workforce; increase the profile of Georgia Tech and the impact of its research community; and attract research and implementation partners to Georgia Tech to promote innovation.

These duties will include activities that foster synergies between IDEaS and GT's AI centers (including The Center for High-Performance Computing, The South Big Data Innovation Hub, AI Institute for Adult Learning and Online Education, Transdisciplinary Research Institute for Advancing Data Science, and TechAI) and enable data-science nonexperts to apply big-data concepts to their fields of study. Externally, the executive director will build and support the research portfolio of Georgia Tech faculty by serving as an advocate for research engagement with companies, federal agencies, national labs, regional entities, and our state and city.

The executive director is also expected to prepare IDEaS to meet its future needs and the needs of the broader research community through developing a fundraising strategy that promotes faculty success in developing a robust funding base within our evolving environment. This will likely involve developing capabilities for securing both federal and nonfederal funds, i.e., funds from foundations, state government, regional entities, industry, and individual donors.

This individual will be responsible for mentoring and developing staff and faculty, and stewarding IDEaS's overall strategic direction through key initiatives. They will implement an administrative structure with diverse representation supporting community engagement needs. This approach will value the incorporation of distinct research perspectives and lived experiences in a welcoming and inclusive environment where all voices are heard and valued. Lastly, the executive director is responsible for IDEaS's budgetary and financial commitments and requests.

### **Skills & Expertise**

The successful candidate will be a visionary, innovative, and entrepreneurial leader with a collaborative and strategic mindset to grow and engage the IDEaS community while working with the executive directors of other IRIs and the Office of the Vice President for Interdisciplinary Research (VPIR). They will have excellent communication and interpersonal skills to effectively promote IDEaS's initiatives externally and internally. They will demonstrate an openness to new ideas that embrace innovation and be willing to learn and adapt as the community and its needs evolve.

This individual will have experience in guiding, influencing, and leading teams, managing budgets and finances, and promoting transparency in decision making and operations. They will be a thought leader with deep knowledge and research expertise in at least some of IDEaS's (current or future) broadly defined focus areas. They will lead with a vision for systemic change while understanding the nuances of the needs of varying stakeholder groups. The successful

candidate will also be a problem solver with the ability to navigate complex situations, manage multiple priorities, and adapt to changing circumstances.

# **Background**

Applicants must be a tenured academic faculty or senior/principal research faculty member at Georgia Tech, including GTRI. The successful candidate will be a national or international leader in their discipline with a deep history of peer-recognized scholarship or other research contributions relevant to data science and engineering. Other desirable qualities include direct or collaborative experience with external partners from industry, government, or non-governmental organizations, experience in securing and managing external funding, prior leadership experience or experience in administrative roles, and/or experience leading collaborative research teams. We encourage applications from individuals who have and have not previously been directly affiliated with IDEaS, and welcome new visions for the future of IDEaS.

# **Reporting Relationship**

IDEaS reports to the VPIR in Georgia Tech's Office of the Executive Vice President for Research, working with other IRI executive directors and campus leaders on strategies and operations for interdisciplinary research at Georgia Tech. All IRI executive directors allocate approximately 50% of their effort to their primary faculty affiliation and approximately 50% to the leadership of the IRI.