Faculty Position in the Grado Department of Industrial and Systems Engineering
Virginia Tech – *CCAM Research Fellow in Digital Manufacturing*

The Grado Department of Industrial and Systems Engineering (ISE) at Virginia Tech and the Commonwealth Center for Advanced Manufacturing (CCAM) invite applications for a ***Digital Manufacturing CCAM Research Fellow*** to work on collaborative teams with industry technical leaders, academic experts, and world-class researchers to develop and implement solutions for real-world challenges in advanced manufacturing. The Digital Manufacturing CCAM Research Fellow will join the VT ISE faculty in this non-tenure-track position as an Assistant, Associate, or Full Research Professor and will report to the ISE Department Head. This position will be physically located at CCAM in Disputanta, Virginia. The Research Fellow will work closely with the CCAM Chief Executive Officer, assisting in identification, development, and implementation of CCAM's digital manufacturing program in collaboration with CCAM management. An essential activity is to participate in the assessment of the program and ensure it meets research objectives and goals. We seek outstanding candidates in all areas related to digital manufacturing with specific research areas of interest, including but not limited to: digital twin methodologies, digital thread technology, cyber-manufacturing, design optimization for manufacturing, integrated factory automation, smart-sensor infrastructure, and artificial intelligence/machine learning for design and manufacturing. This position is targeted to fulfill part of a coordinated team hiring effort at Virginia Tech that spans multiple departments across the College of Engineering for a new initiative focused on the future of manufacturing. Thus, candidates will have the opportunity to work with a wide range of research groups and industry partners at the CCAM and the VT College of Engineering, including those working in the areas of advanced manufacturing, industrial analytics, operations research, decision sciences, human-machine systems, and the intelligent factory, among others. We are particularly interested in candidates with expertise that can integrate strongly with this interdisciplinary team of faculty and contribute to its growth and leadership.

The ISE Department has 33 tenured/tenure-track faculty, with an additional eight non-tenure-track instructional and research faculty. Six faculty are recent early investigator recipients, and numerous other faculty have received international or national recognition. Academic programs and research in the department encompass Human Factors and Ergonomics, Manufacturing, Management and Systems Engineering, and Operations Research. The department is home to approximately 600 undergraduate students, 100 master's students, and 115 doctoral students. The undergraduate and graduate ISE programs are currently ranked fourth and seventh, respectively, by U.S. News & World Report. Additional information is available at: www.ise.vt.edu.

Virginia Tech is a public land-grant university, committed to teaching and learning, research, and outreach to the Commonwealth of Virginia, the nation, and the world. Building on its motto of Ut Prosim (that I may serve), Virginia Tech is dedicated to InclusiveVT—serving in the spirit of community, diversity, and excellence. Virginia Tech actively seeks a broad spectrum of candidates to join our community in preparing leaders for the world. The College of Engineering undergraduate program ranks 16th and graduate program ranks 31st among all U.S. engineering schools (USN&WR). The mission of the College of Engineering is to educate and inspire our students to be critical thinkers, innovators and leaders. Our core values are inclusiveness, excellence, integrity, perseverance and stewardship. Virginia Tech's main campus is located in Blacksburg, VA, in an area consistently ranked among the country's best places to live. In addition, our facilities in the Washington, D.C., area offer unique proximity to government and industry partners and is also expanding rapidly, with Virginia Tech's exciting new Innovation Campus in Alexandria, VA, slated to open in 2024.

Candidates are expected to lead innovative scholarship and research, develop and sustain an externally-funded research program, and serve the university and the profession. Candidates at the Research Assistant Professor level are expected to have the potential to obtain extramural funding to support research endeavors, experience working as part of a research team, and publications in peer-reviewed journals/conferences. Candidates at the Research Associate and Full Professor level are expected to have demonstrated the ability to obtain extramural funding to support research endeavors, experience leading a research team, and demonstrated success and impact from publishing research in peer-reviewed publications. The position requires a Ph.D. in industrial and systems engineering, mechanical engineering, electrical and computer engineering or a closely related field. The successful candidate will have the ability to access technology or intellectual property that is subject to export control requirements. Candidates must be US persons (US citizens or US permanent residents) for such access without an export control license. The successful candidate will also be required to have a criminal conviction check. Preferred qualifications include: experience working in industry or a research facility directly associated with digital manufacturing; interest in applied research with the objective of technology transition to

industry members; ability to lead, manage and motivate research personnel to business-oriented goals; ability to manage the achievement of time, cost, and quality goals within a research and development environment; experience working across the academic/industry interface for the delivery of business-focused solutions; clear understanding of the research and development needs of industry members and the research-related needs of university partners; and ability to communicate research ideas and concepts in a business and university context at executive and technical levels.

Applicants must apply online at *jobs.vt.edu* (posting number 521949). Application materials include a cover letter, current CV, two separate statements limited to three pages each (research statement and contributions to diversity, equity, and inclusion), and contact information for at least three professional references. Review of applications will commence November 21, 2022 and continue until the position is filled. Questions regarding the positions should be directed to Dr. Zhenyu ("James") Kong (zkong@vt.edu, 540-231-9762). For assistance submitting the application, please contact ise-search@vt.edu.

The department fully embraces Virginia Tech's commitment to increase faculty, staff, and student diversity; to ensure a welcoming, affirming, safe, and accessible campus climate; to advance our research, teaching, and service mission through inclusive excellence; and to promote sustainable transformation through institutionalized structures. Virginia Tech does not discriminate against employees, students, or applicants on the basis of age, color, disability, sex (including pregnancy), gender, gender identity, gender expression, genetic information, national origin, political affiliation, race, religion, sexual orientation, or veteran status, or otherwise discriminate against employees or applicants who inquire about, discuss, or disclose their compensation or the compensation of other employees or applicants, or on any other basis protected by law. If you are an individual with a disability and need an accommodation, please contact Ms. Heather Parrish (parrish1@vt.edu, 540-231-9079).