Inaugural Executive Director, Institute for Advanced Computing
Virginia Tech – Greater Washington, D.C. Area
Alexandria, Virginia

THE SEARCH

Virginia Tech invites nominations and applications for the position of the inaugural Executive Director of the Institute for Advanced Computing (IAC). The Executive Director will serve as the visionary and strategic leader responsible for shaping and growing the recently established Institute. Reporting to the Vice President for the Greater Washington D.C. Area, and working collaboratively with senior university leadership, the Executive Director will lead the IAC in becoming a national leader in advanced computing research and education.

The successful candidate must be a highly collaborative leader with a demonstrated ability to foster cooperation across disciplinary, institutional, and organizational boundaries. The Executive Director will be expected to thrive in a distributed environment—both geographically, given Virginia Tech's multi-campus presence, and organizationally, working effectively across diverse units and stakeholder groups. Equally important, the Executive Director should bring a strong record of program execution and partner engagement, including the capacity to translate strategic vision into operational success, deliver on complex initiatives, and sustain momentum across multiple priorities and constituencies.

This is a rare opportunity for a bold, collaborative, and entrepreneurial leader to build a dynamic, interdisciplinary institute from the ground up—at the intersection of academia, government, and industry—in one of the most vibrant tech corridors in the country.

Virginia Tech has retained Isaacson, Miller, a national executive search firm, to assist with this important search. Confidential applications, inquiries and nominations should be directed to the search firm as indicated at the end of this document.

ABOUT THE INSTITUTE FOR ADVANCED COMPUTING AND VIRGINIA TECH – GREATER WASHINGTON, D.C. AREA

The Institute for Advanced Computing

The Future is Here

Virginia Tech is expanding its impact in the greater Washington, D.C. area with the recent launch of the IAC, a bold new university-level initiative designed to lead in research, innovation, and education at the convergence of core computing and its transformational applications. Anchored at Virginia Tech's new building in Alexandria, the IAC will serve as a cross-cutting academic and research hub focused on computing with an emphasis on artificial intelligence, machine learning, quantum computing, next-generation wireless, and intelligent interfaces. The institute also oversees Master of Engineering programs in computer science and computer engineering, emphasizing project-based, industry-informed learning.

The Institute holds a distinctive mandate within Virginia Tech. In addition to advancing world-class research, the Institute is responsible for delivering high-quality academic programs—notably industry-informed Master of Engineering degrees. This dual charge requires integrated leadership that connects instruction and discovery, ensuring that pedagogical excellence and research innovation reinforce one another and deliver visible impact for students, faculty, partners, and the Commonwealth of Virginia.

With a mission to address global-scale challenges and drive economic and technological advancement, the IAC will leverage Virginia Tech's land-grant mission, its partnerships with industry and government, and its strategic location near our nation's capital. It represents the next phase of Virginia Tech's evolving innovation ecosystem, following the development of an innovation campus in partnership with Amazon HQ2.

At the Nexus of Academia, Industry, and Government

Located on Virginia Tech's 3.5-acre innovation campus in Alexandria, Virginia, the IAC is just steps away from Reagan National Airport and leading tech companies in the growing National Landing technology district. The campus location is uniquely positioned to connect IAC students and faculty to the greater D.C. metropolitan region, while allowing DC area leaders in academia, industry, and government to easily convene at the facility.

The Institute is housed in a new 11-story, 300,000 square foot academic building that provides the ideal space for experiential learning opportunities, a state-of-the-art hub for computer science and computer engineering graduate students that also serves as home to a range of other academic programs and initiatives that enrich the university's teaching, research, and outreach mission. Building highlights include: multi-purpose areas, research and testing labs, a cyber-physical systems lab, maker spaces, a two-story indoor drone testing cage, and more. Designed for cutting-edge innovation, the building embodies

the future of tech education, offering world-class facilities that put IAC students at the center of emerging technology breakthroughs.

About Virginia Tech – Greater Washington, D.C. Area

Virginia Tech is firmly planted in the greater Washington, D.C. area and continues to advance the university's missions of instruction, research, and outreach. With humble beginnings in a Reston farmhouse, which served as a graduate center in 1969, the greater D.C. area locations today include the Washington Alexandria Architecture Center (WAAC) in Old Town Alexandria, Academic Building One in Alexandria's Potomac Yard district, the Virginia Tech Research Center in Arlington, and the Coalition for Smart Construction at Virginia Tech that is planned to open in Falls Church in 2026. Across the region, some 1,077 graduate students are enrolled in more than 45 graduate degree programs taught by 120 full-time faculty members. More than 85 active researchers are responsible for research expenditures in excess of $15 million, and growing.

KEY RESPONSIBILITIES OF THE EXECUTIVE DIRECTOR

The Executive Director will provide visionary and strategic leadership, developing and articulating a compelling vision for the Institute's growth and impact. This includes building a vibrant, interdisciplinary community of faculty, researchers, students, and partners, and positioning the Institute as a national and international leader in advanced computing research and graduate education.

A central part of the role is to recruit, retain, and support a world-class faculty, while guiding research initiatives in areas such as artificial intelligence, machine learning, quantum computing, wireless communications, cybersecurity, and other emerging domains. The Executive Director will foster interdisciplinary collaborations across Virginia Tech and with external partners, ensuring the Institute serves as a bridge between academia, government, and industry.

Externally, the Executive Director will cultivate and grow partnerships with industry, government, non-profit organizations, and philanthropic donors. By representing the Institute to external stakeholders, the Executive Director will strengthen collaborations, expand research funding, and contribute to public-private initiatives that advance economic and workforce development.

On the educational front, the Executive Director will oversee and enhance the Master of Engineering programs in computer science and computer engineering, ensuring they remain innovative, project-based, and industry-informed. The role also involves fostering experiential learning opportunities and professional development for students.

Finally, the Executive Director will lead the Institute's organizational development by shaping governance, staffing, and operations. This includes managing budgets, allocating resources, and advancing fundraising efforts in collaboration with university leadership. In all aspects of this work, the Executive Director is expected to promote a culture of excellence, transparency, innovation, and community.

Distinctive Leadership Qualities

In addition to traditional academic leadership experience, the ideal candidate will demonstrate:

- **Name Recognition** – A reputation that is widely recognized in the technology community, enabling the recruitment of stellar faculty and students.
- **Exceptional Leadership** – A proven ability to unite and inspire faculty across disciplines, establishing a cohesive identity for a newly created institute that spans multiple academic traditions.
- **Collaborative Capacity** – A record of building bridges across disparate fields (e.g., engineering, business, policy, social sciences, arts, mathematics, and physics) and creating integrated, interdisciplinary programs.
- **Partner Orientation** – Demonstrated success in cultivating partnerships with the full spectrum of industry, from startups to global corporations, as well as with government and nonprofit entities.
- **Creativity and Vision** – The imagination to identify transformative opportunities, the leadership to mobilize stakeholders, and the initiative to launch new ventures that distinguish the Institute nationally.
- **Fundraising Acumen** – A proven track record in philanthropic fundraising with donors and corporations; experience in mobilizing significant resources to support ambitious goals.
- **Strategic Focus** – An understanding of enrollment pipelines, program scaling, and student experience, with the capacity to lead the largest residential Master of Engineering programs in the nation.
- **Communication Excellence** – Outstanding communication skills across all audiences, including faculty, students, university leadership, alumni, policymakers, media, and the public.

KEY OPPORTUNITIES AND CHALLENGES FOR THE EXECUTIVE DIRECTOR

The inaugural Executive Director of the IAC will join Virginia Tech at a defining moment of institutional ambition and regional growth. As the university deepens its presence in the greater Washington, D.C. area, the IAC represents a bold next step: bridging academia, industry, and government to drive innovation in advanced computing, research, and graduate education. With its structure, identity, and partnerships still evolving, the IAC offers a rare opportunity for a builder: a leader with entrepreneurial spirit, strategic vision, and the operational drive to shape a high-impact institute from the ground up.

The Executive Director must operate at an institutional level — engaging senior leadership, donors, and external partners—while also leading Institute operations, including faculty workload management, curriculum oversight, and fostering the organization's culture among the faculty and staff. The Executive

Director will need to balance delivering on the vision and strategy for the Institute, while remaining hands-on with faculty and staff to ensure successful program execution and implementation.

Key opportunities and challenges include:

Shape a distinct identity for the Institute

Born out of the Innovation Campus initiative, the IAC must now solidify its identity as one of Virginia Tech's four thematic institutes, and one with an educational component in addition to its research mission. The Executive Director will be charged with articulating a clear and compelling vision that balances academic excellence, industry relevance, and public impact. The successful candidate will be responsible for shaping a clear and compelling institutional identity for the IAC, one that reflects Virginia Tech's land-grant mission while distinguishing the Institute within a competitive landscape of computing research and education. The new leader must define its strategic direction, align internal and external stakeholders around a unified vision, and ensure the IAC's identity is both distinctive and integrated within the broader university. Equally critical, the Executive Director must translate that vision into operational success: building faculty culture, establishing sustainable programming, and delivering results across research, education, and engagement. This opportunity requires a leader who is both entrepreneurial and grounded, capable of setting ambitious goals while executing with precision and persistence.

Scale graduate education in advanced computing, meeting the workforce needs of Virginia's innovation economy

The Executive Director will be responsible for rapidly scaling its Master of Engineering programs in computer science and computer engineering. These programs are central to Virginia Tech's commitment under the Commonwealth of Virginia's Tech Talent Investment Program (TTIP). With current enrollment at approximately 200 students and a stated goal to triple that number to 600 in the coming years, the Executive Director will be charged with leading this expansion in a sustainable and strategic way. The programs are designed to be project-based, industry-informed, and responsive to workforce needs, with a special emphasis on serving students from Virginia and across the country. Achieving this growth will require innovative instructional models, expanded industry partnerships, and enhanced student support.

Position IAC as a leader in advanced computing research

The IAC is home to faculty with research strengths in artificial intelligence, quantum computing, cybersecurity, and next-generation wireless. The Executive Director will be expected to grow the Institute's research enterprise and elevate its reputation as a hub of discovery, innovation, and applied impact. There is significant opportunity to expand sponsored research, form new collaborations with government and industry, and create mechanisms that link research and education in mutually reinforcing ways. The Executive Director must ensure that the Institute's instructional and research missions are fully aligned. They must enable a virtuous cycle where graduate students contribute to funded research, faculty research informs curriculum, and internal and external collaborations reinforce both missions, helping to ensure the IAC's impact is both scholarly and societal.

Foster a cohesive faculty culture centered on academic excellence

With the Institute still in its formative years, this is a rare moment to create a faculty culture that is innovative, interdisciplinary, and collaborative from the ground up. IAC faculty are jointly affiliated with home departments on the main campus in Blacksburg, particularly in Computer Science and Electrical and Computer Engineering. This structure creates a powerful opportunity to develop a culture that is both locally grounded and institutionally connected. The Executive Director will have the chance to bring faculty together around common goals in research, teaching, and mentorship; to shape the rhythms, norms, and values of a newly forming community; and to ensure that faculty feel supported and engaged in both their disciplinary homes and the Institute itself. This will require sustained, one-on-one engagement with faculty; transparent communication around research, teaching, and service expectations; and the development of internal norms and values that reinforce the Institute's identity.

Lead an ambitious fundraising strategy to support the Institute's growth

The IAC plays a central role in Virginia Tech's commitment to TTIP. As part of this initiative, the university is committed to raising $250 million in private support to match state investments in graduate education and innovation infrastructure in Northern Virginia. Approximately $112 million has been secured to date, and the IAC will be expected to contribute significantly to the remaining target. The Executive Director will enter a landscape with a mix of legacy private and corporate donors as well as emerging new funders. The Executive Director must be both a visionary leader and a hands-on fundraiser that is capable of aligning Institute priorities with donor interests, articulating a compelling case for support, and delivering on Virginia Tech's broader promise to the region and the Commonwealth. Opportunities exist for named professorships, faculty cluster hires, and capital projects. The Director will work closely with the university's advancement team to engage existing supporters and cultivate new donors, particularly among those with strategic interests in AI, quantum computing, next-generation wireless, cybersecurity, and workforce development.

Build and cultivate strategic partnerships across industry sectors and the university

Sitting at the nexus of industry, government, and academia, the Institute is uniquely positioned to serve as both a convener and a catalyst for high-impact collaborations. While foundational relationships exist with major organizations such as Boeing, Northrop Grumman, Amazon, and federal agencies, the Institute now has an opportunity to focus and grow its external engagement strategy. This includes building relationships focused on long-term, mission-aligned partnerships that support project-based learning, applied research, and strategic investment in key focus areas. Equally important is the need to lead internally as a collaborative partner across Virginia Tech's distributed research and academic enterprise. The Institute must work fluidly with academic departments, senior administrative leaders, and across Virginia Tech's network of research institutes. There are significant opportunities for vertical integration across fundamental and applied research, and navigating these collaborations requires the ambition to co-create new models of partnership.

QUALIFICATIONS AND CHARACTERISTICS

Required Qualifications

- An earned doctorate in computational sciences/engineering or a closely related field.
- A distinguished record of scholarly achievement, teaching, and research appropriate for a tenured faculty appointment at Virginia Tech.
- Proven leadership experience in a complex academic, research, or technology environment.
- Demonstrated ability to develop and manage high-impact research and educational programs.
- Strong record of fostering interdisciplinary collaboration and external partnerships.
- Evidence of capacity in fundraising, strategic enrollment growth, and external communications.

Preferred Qualifications

- Experience building and leading new academic or research organizations.
- Deep understanding of the advanced computing ecosystem, including emerging technologies and societal impact.
- Demonstrated success in working with industry and government partners to secure external funding and translate research into real-world impact.
- Experience in graduate program leadership and curriculum development.

LOCATION AND CONTEXT

This position is based in Alexandria, Virginia, within Virginia Tech's growing presence in the greater Washington, D.C. area. The Executive Director will work closely with leadership across all Virginia Tech campuses, including the Innovation Campus in Northern Virginia and the main campus in Blacksburg.

Alexandria, Virginia

Located on the Potomac River just across from Washington, D.C., Alexandria, Virginia, combines a rich historical heritage with a vibrant, cosmopolitan atmosphere. Established in 1749, the city features the nation's third-oldest historic district, where meticulously preserved 18th- and 19th-century architecture lines charming streets. Visitors and residents alike enjoy a lively downtown experience, home to more than 200 independent shops and restaurants, historic museums, and a bustling waterfront. Alexandria has been recognized by *Travel + Leisure* and *Condé Nast Traveler* as one of the nation's top small cities for its unique blend of history, culture, and modern amenities. See Visit Alexandria for more information.

APPLICATIONS, INQUIRIES, AND NOMINATIONS

Screening of complete applications will begin immediately and continue until the completion of the search process. Inquiries, nominations, referrals, and CVs with cover letters should be sent via the Isaacson, Miller website:

https://www.imsearch.com/open-searches/virginia-polytechnic-institute-and-state-university-institute-advanced-computing

Electronic submission of materials is strongly encouraged.

Pam Pezzoli, Partner
Raul Bernal, Senior Associate
Melissa Barravecchio, Senior Search Coordinator

Isaacson, Miller

APPENDIX

Institutes at Virginia Tech

Virginia Tech research institutes enhance the university's ability to address large-scale research opportunities by crossing traditional disciplinary boundaries. The eight institutes provide faculty, students, and partners access to world-class expertise across many disciplines and to the scientific and technical capability of specially equipped, advanced laboratories.

Thematic Institutes

Virginia Tech's thematic institutes are high-level organizations focused on thematic research areas of particular strategic interest to Virginia Tech. While faculty who are appointed to serve in these institutes retain their tenure in their respective academic departments, their primary membership, position funding, and identity align with the institute. The high density of research activity in thematic institutes generates interdisciplinary collaborations that amplify research productivity and impactful scholarship. They are provided with physical infrastructure that enables leading-edge interdisciplinary research in a particular area that aligns with the university's vision and mission. In addition to receiving investments of university funds, thematic institutes also have deep relationships with sponsors and receive substantial extramural research grants and/or contract funding through them.

- **Fralin Biomedical Research Institute at VTC**
- **Institute for Advanced Computing**
- **Virginia Tech National Security Institute**
- **Virginia Tech Transportation Institute**

Investment Institutes

Virginia Tech's investment institutes are high-level organizations designed to convene research teams comprising faculty from across the university to work on high-value interdisciplinary research projects. This work is enabled by providing essential resources in the form of grant support, specialized research spaces and core equipment. Projects are supported for periods generally shorter than a few years, until they are ready to secure the extramural funding necessary for their continuing growth. Faculty members engaged in these projects retain their primary membership and identity in their respective academic departments.

- **Fralin Life Sciences Institute**
- **Institute for Creativity, Arts, and Technology**
- **Institute for Critical Technology and Applied Science**

- **Institute for Society, Culture, and Environment**

About Virginia Tech

As the commonwealth's most comprehensive university and a leading research institution, Virginia Tech offers about 280 undergraduate and graduate degree programs to more than 38,000 undergraduate, graduate, and professional students across the commonwealth and manages a research portfolio of more than $556 million. The university fulfills its role as a land-grant institution by fostering a collaborative environment that integrates technology into all disciplines, so that the Virginia Tech community can serve as a force for positive change around the commonwealth, the country, and the world.

Through experiential learning, future-focused research, and a highly-collaborative culture, Virginia Tech strives to accomplish the charge of its motto *Ut Prosim* (That I May Serve). By engaging students and faculty in hands-on discovery, advancing knowledge that addresses the challenges of tomorrow, and fostering an academic community where every individual feels a sense of shared purpose, the university seeks to advance discoveries and cultivate leaders whose ideas and actions reshape society, redefine possibility, and chart a better future for the world.

Virginia Tech has a 2,600-acre main campus in Blacksburg, Virginia; a significant presence across the commonwealth, including the Institute for Advanced Computing in Northern Virginia, the Health Sciences and Technology Campus in Roanoke, and sites in Newport News and Richmond; educational and research facilities across the state; a study-abroad site in Switzerland; and a 1,800-acre agriculture research farm near the main campus. The campus proper is located in the New River Valley and is 38 miles southwest of Roanoke.

The university is ranked in the top 6 percent of universities in the nation for research expenditures. University finances include a $2.27 billion operating budget (2024-25), $3.026 billion in assets and managed funds (as of June 30, 2024), and a $1.95 billion endowment (as of June 30, 2024).

Dr. Tim Sands serves as president, and Dr. Cyril Clarke serves as executive vice president and provost of Virginia Tech.

For more information on Virginia Tech, visit the Facts About Virginia Tech website.