

# Tenure-track Position in Autonomic Systems / Ultra-Large-Scale Cyber-Physical Systems:

The Bradley Department of Electrical and Computer Engineering at Virginia Tech seeks applications for a tenure-track assistant professor position in computer engineering, specifically in the area of autonomic systems, which are self-configuring, self-healing, self-optimizing, and self-protecting, and ultra-large-scale cyber-physical systems, such as swarms and the Internet of Things (IoT). This position is based in Virginia Tech's Blacksburg campus. Applicants should have expertise in one or more of the following areas:

- **Autonomic systems**
- **Ultra-large-scale cyber-physical systems**
- **Rapid system prototyping**
- **Approximate computing and computational complexity**
- **Survivable systems and networks**

The successful candidate will be expected to develop a vigorous research program in his or her areas of expertise and to work with existing Virginia Tech ECE faculty with expertise covering embedded systems and software, hardware security, reconfigurable computing and security, network security, communication security, design automation, formal methods, autonomic systems, power and energy, and system implementations. Beyond the ECE department, the university has world-class research activities in robotics, transportation and civil infrastructure, advanced manufacturing, data analytics, and policy.

The successful candidate will be expected to develop and maintain a nationally-recognized funded research program, teach undergraduate and graduate courses, and participate in department, college, and/or university service and outreach activities.

## Required Qualifications

- An earned Ph.D. in Computer Science, Computer Engineering, Electrical Engineering, or a related field, completed prior to employment
- Demonstrated excellence in research, scholarship, and teaching in computer engineering, or evidence of high potential for such excellence
- Ability to articulate a coherent agenda of research or scholarship and to identify potential funding sources to support such research
- Effective communication skills
- Willingness and ability to work in a technology-based research and education environment, such as is characterized by use of learning technologies, distance learning, online courses, video-conferencing, and network and grid-based collaborative research

## Preferred Qualifications

- Prior experience in the role of PI or Co-PI on funded research projects
- Ability and willingness to work collaboratively with faculty from a variety of disciplines
- Ability to articulate a coherent agenda of research or scholarship and to identify potential funding sources to support such research
- Experience in working with students as academic or career advisor, overseeing student internships or service-learning activities
- Interest or experience in mentoring students, both undergraduate or graduate, in research
- Interest or experience working effectively with a diverse student population

## The ECE Department

The Bradley Department of Electrical and Computer Engineering offers B.S., M.S., and Ph.D. degree programs in both Electrical Engineering and Computer Engineering with a current enrollment of approximately 1,100 undergraduate and 550 graduate students at the Blacksburg, VA campus. A graduate program and research activities are also located in the National Capital Region with full-time ECE faculty who interact closely with the programs in Blacksburg.

The Department has **76 full-time** tenured or tenure-track faculty members. The department has some of the nation's best programs in the areas of power electronics, wireless communications, computer networking, digital design, electromagnetics, space science and remote sensing, fiber optics, sensors, and photonics. The Department is the beneficiary of the Bradley Endowment valued in excess of \$15 million. For additional information about the department and the College of Engineering, please visit [www.ece.vt.edu](http://www.ece.vt.edu) and [www.eng.vt.edu](http://www.eng.vt.edu).

## The University

Through a combination of its three missions of discovery, learning, and engagement, Virginia Tech continually strives to accomplish the charge of its motto Ut Prosim (That I May Serve). Virginia Tech is the Commonwealth's senior land-grant institution located in Blacksburg in the scenic mountains of southwestern Virginia, about 40 miles west of Roanoke. Highly selective in admissions, the University enrolls approximately 25,000 undergraduate and 6,500 graduate students, and more than 2,600 faculty members and researchers. The university offers 77 bachelor's degree programs through its seven undergraduate academic colleges: Agriculture and Life Sciences, Architecture and Urban Studies, Engineering, Liberal Arts and Human Services, Natural Resources, Pamplin College of Business, and Science. On the graduate level, the university offers 76 master's and 62 doctoral degree programs through the Graduate School and a professional degree from the Virginia-Maryland Regional College of Veterinary Medicine. The university also has a public-partnership in the form of a medical school and research institute, the Virginia Tech Carilion School of Medicine and Research Institute. For more information about the university and the Town of Blacksburg, please visit [www.vt.edu](http://www.vt.edu) and [www.blacksburg.va.us](http://www.blacksburg.va.us), respectively.

## The Application Process

Qualified applicants must submit a letter of application, a curriculum vita, a research statement, a teaching statement, and a list of at least three references electronically to [jobs.vt.edu](http://jobs.vt.edu). Apply to posting number **TR0150118**. Please follow carefully the instructions found on the employment website regarding the application submission process. Unfortunately, we are unable to accept paper applications. Paper applications or electronic applications sent via e-mail cannot be considered. Review of applications will begin November 15, 2015 and will continue until the position is filled with an appropriate candidate. The anticipated start date is August 2016.

Applications from women and other underrepresented populations in engineering are especially encouraged. Virginia Tech has a program designed to support the retention and advancement of female faculty; see [www.advance.vt.edu](http://www.advance.vt.edu). Individuals with disabilities desiring accommodation in the application process should notify K. Atkins, ECE Dept, (540) 231-4136 or TDD/PC 1-800-828-1120 or Voice 1-800-828-1140.

Virginia Tech is an Affirmative Action/Equal Opportunity Employer.