

SCHOOL of ENGINEERING & APPLIED SCIENCE

The [Department of Electrical and Computer Engineering](#) at the University of Virginia is seeking applicants for a Research Associate position. The research involves the development of machine learning algorithms and MR pulse sequences for next-generation computational MRI. The position will be at the [computational imaging group](#), directed by [Prof. Mathews Jacob](#). The position will provide a unique opportunity to work on the cutting edge of deep learning and signal processing to exploit the power of state-of-the-art hardware in MRI. The work will involve a good mix of theory, algorithm development, sequence programming, and validation. The group has been actively developing machine learning algorithms for model based deep learning; candidates may look up the recent [publications](#) to get a flavor for the research.

The research will be conducted at the [Electrical and Computer Engineering](#) lab and the [Radiology Research Laboratory](#), which houses several 3T and 1.5T Siemens scanners. The position provides opportunities for close collaboration with the [Department of Radiology](#) within the [School of Medicine](#), and [School of Data Science](#).

QUALIFICATION REQUIREMENTS: A Ph.D. in electrical engineering, biomedical engineering, or applied math is required by the start date. Experience in signal processing, machine learning, and MRI is desirable. The position is funded by NIH awards on high-resolution brain relaxometry, free-breathing cardiac MRI, and MR spectroscopic imaging using machine learning; candidates with experience in these areas are encouraged to apply.

The University of Virginia is located in [Charlottesville](#), nestled in Central Virginia. Located just east of the Blue Ridge Mountains, residents enjoy natural beauty and a convenient location. You are within a few minutes' drive of The Appalachian Trail and the Blue Ridge Parkway, one hour drive to the state capital of Richmond, and two hours to Washington, DC.

APPLICATION PROCEDURE: Apply online at https://uva.wd1.myworkdayjobs.com/UVAJobs/job/Charlottesville-VA/Research-Associate-in-Electrical-and-Computer-Engineering_R0057301 and attach a cover letter, CV/resume, and contact information for three references (name, email address, telephone number, and address). Please contact [Mathews Jacob](#) (wzr8sn@virginia.edu) for more information.