



Software Engineering and Programming Position in Medical Imaging

A software developer position is available immediately at the Center for Biomedical Imaging of the New York University (NYU) Langone Medical Center. The position will be integrated into a research team working on a multi-platform software for the design and evaluation of radiofrequency (RF) coils for applications in magnetic resonance imaging (MRI). The aim of this NIH funded project is to disseminate a software package, with an intuitive Graphical User Interface (GUI), a common data structure, I/O compatibility with existing software and a modular architecture, to allow straightforward creation of stand-alone applications tailored to specific needs and incorporation of additional modules by members of the MRI community. We will freely distribute our software under a public license for educational and research purposes. There would be an opportunity to explore commercialization of the software package, which we expect will have a profound impact on MRI technology development.

Responsibilities: as part of the project team, the candidate will be involved in the following activities:

- Devise a modular and flexible architecture for a generalizable software platform
- Design, implement and validate a graphical user interface
- Optimize existing code and develop new software modules
- Work collaborative and closely with other engineers and physicists
- Perform code maintenance and testing

Qualifications: We are looking for a self-driven, creative, and interactive individual who is motivated to acquire new skills and work with an interdisciplinary team. The ideal candidate would have a degree in software engineering, computer science, or equivalent. Requirements for this position include good knowledge of object-oriented programming, strong programming skills in C++, experience in developing Graphical User Interfaces. Knowledge of Matlab programming, Unified Modeling Language (UML), web-development techniques, cloud-computing infrastructure, managing and contributing to open-source projects will be considered a plus.

About Us: The NYU Bernard and Irene Schwartz Center for Biomedical Imaging (CBI) is located in midtown Manhattan and houses approximately 120 full-time research staff providing state-of-the-art facilities, including a 7 Tesla (T) and two 3 T whole body MR scanners, a 3 T MR-PET scanner and a fully equipped radiofrequency engineering laboratory. CBI space and infrastructure also support the Center for Advanced Imaging Innovation and Research (CAI²R), a new model of academic-industrial and interdisciplinary collaboration (<http://cai2r.net/>). CAI²R researchers, many renowned in their respective fields, focus on new methods and new paradigms for rapid continuous comprehensive imaging, including but not limited to novel rapid MR acquisition and reconstruction strategies, novel RF detectors and transmitters, novel quantitative biomarkers for MRI and PET. CAI²R collaborates with several academic institutions around the world and partners with industry for rapid technology transfer. CAI²R's approach is to encourage collaboration across research groups, to promote creativity and build a suitable environment for breakthrough innovations at the forefront of biomedical research.

Salary/Benefits: The position is for up to four years, contingent on performance, and potentially renewable for additional years. Salary is commensurate with experience. Full benefits will be provided.

To Apply: Email a cover letter, a paragraph explaining your interest in the project and your CV to Riccardo Lattanzi, Ph.D. (Associate Professor of Radiology, Electrical and Computer Engineering, Riccardo.Lattanzi@nyumc.org).