Philips Research Scientist - Physics & Algorithms CT R&D

In this role, you have the opportunity to

At Philips, we simplify healthcare by focusing on the people in the care cycle – patients and care providers. Through combining human insights and clinical expertise, we aim to improve patient outcomes while lowering the burden on the healthcare system. Philips delivers advanced solutions for both health professionals, to meet the needs of patients, and empowered consumers for affordable healthcare whether in hospital or at home.

Philips Imaging Platform is seeking an imaging scientist in the area of CT. The scientist will be responsible for driving innovative physics-based projects.

You are responsible for

- Investigate and develop new/improved data corrections, including calibrations and image post processing with special focus on Image Quality. Conduct research independently, with minimal support.
- Continuously contribute to the development and maintenance of the R&D tools for data simulation and image formation for new product/features. Provide processing benchmarks, dataflow requirements, and documentation of Software Requirement Specifications.
- Develop and maintain a thorough in-depth understanding of current CT physics processing algorithms. Understand the impact of proposed/required changes to the entire image chain, especially where changes in one processing section may require changes in another.
- Investigate image quality issues during new product/features introduction or issues reported from installed base. Update stakeholders on image quality findings. Document and provide safe and effective solutions based on these findings.
- Utilize holistic, system-wide engineering approach for developing new product/features introduction. Keep up to date
 on software technologies and theoretical concepts and participate in process improvement activities. Expand
 knowledge of clinical applications on medical imaging products and the relation to available processing options.
- Standardize and harmonize way of working with Philips core principles to add value for new product/features. Strive for improvement by benchmarking internally and externally.
- Develop and own Imaging Platform technology roadmap in physics. Represent Philips at technical and regulatory agencies/events. Publish in peer-reviewed journals and file intellectual property.
- Develop innovative physics-based solutions and own advanced development projects in the areas of CT.

You are a part of

Work as part of the Imaging Physics and Algorithm team to support Imaging Platform needs from a Physics perspective. Interact with the global Philips teams to conceive and develop new physics-based corrections leading Image Quality improvements. Utilize the framework of the Advanced Development Tools to facilitate simulation and prototyping of imaging physics. Enhance and improve R&D Tools to better support the needs for image formation efforts.

To succeed in this role, you should have the following skills and experience

- Ph.D. in Physics, Mathematics, Biomedical, Electrical or Nuclear engineering or related fields.
- 3+ years of evidence of high initiative and graduate level research work on in one or more of such fields: medical physics, medical imaging, inverse problems etc.
- Professional experience in Medical Imaging (CT) preferred.
- Demonstrated proficiency with the image/signal processing, GUI and C-MEX functionality of the MATLAB® environment or other computing language.
- Ability to work independently to draw necessary information from a variety of sources in pursuit of a problem solution.
- Excellent written and communication skills ability to document and explain complicated algorithms and problems to non-specialists in a clear and understandable manner.
- Background in theory of medical image formation preferred.

If you are interested, please send us your resume:

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