



April 2021

Postdoctoral Position: Cardiovascular Magnetic Resonance Image Segmentation using Artificial Intelligence (AI)

Department of Radiology, Denver, CO, USA

Postdoctoral research fellow in cardiovascular magnetic resonance image segmentation: The Department of Radiology at the University of Colorado, Anschutz Medical Campus and Children's Hospital Colorado have an open position for a postdoctoral research fellow interested in automatic segmentation of cardiovascular magnetic resonance images using artificial intelligence for surgical planning of children with severe congenital heart disease.

The position is in an active translational research environment blending clinical studies and advanced cardiac imaging techniques, with an emphasis in automatic segmentation. Research area spans the automatic segmentation of the heart and great vessels of children with congenital heart disease using artificial intelligence. The result of segmentation will be used to help cardiac surgeons determine the optimal surgical approach for each child. This exciting project and close connection with radiologists, cardiologists, and cardiac surgeons allow for the opportunity to enhance clinical practice and improve the care of children with severe congenital heart disease.

Qualifications:

- The applicants should have an advanced degree (Ph.D.) in Physics, Biomedical Engineering, and Electrical Engineering.
- Successful candidates will have a track record of prior work in artificial intelligence.
- The applicants should have expertise in Python, C++, PyTorch and TensorFlow programming.

Environment: The Translational and Computational Research Laboratory (TCRL) and Advanced Imaging Lab in the Children's Hospital Colorado and the University of Colorado, Anschutz Medical Campus is a rapidly growing collaborative endeavor of MRI physicists, engineers, radiologists, cardiologists, surgeons, and imaging scientists. Additional expertise spans the fields of engineering, computer science, cardiology, and cardiac surgery. The Children's Hospital Colorado has four on-site Philips MRI scanners (a 3T Elition, two 3T Ingenia, and a 1.5T Ingenia), along with access to a Siemens 3T MRI Skyra, and a newly arriving GE MRI-PET system.

Please email cover letter and curriculum vitae: mehdi.hedjazimoghari@cuanschutz.edu