

## Introduction

We are QTIM (https://qtim-lab.github.io)— the Quantitative Translational Imaging in Medicine Lab at the Athinoula A. Martinos Center of the Massachusetts General Hospital (MGH). We are affiliated with the Health Sciences and Technology Program at MIT and Harvard Medical School. We are computer scientists, medical physicists, neuro-oncologists, MRI technicians, and clinical research coordinators. We focus broadly on quantitative and machine learning techniques in medical imaging, with a growing interest in deep learning. We try to bridge the gap between machine learning research and clinical practice through fruitful connections with our clinical collaborators in and out of the MGH ecosystem.

## Programmer Analyst

You will be a programmer and web developer for a lab working in the exciting fields of medical imaging, machine learning, and oncology. Your duties will include managing online machine learning competitions hosted by our lab and our collaborators, building software to extend our research tools to clinical users, creating public-facing web-tools to exhibit our imaging research, and in general being a point person for information technology and web development in our lab. You will also help to manage our multi-server GPU clusters and data storage devices, and help members of our lab successfully use and maintain organization on these servers.

Outside of your role as the lab's technical lead, you will have the opportunity to collaborate with or pursue independent research or software projects. Whether your future plans lie in medicine, computer science, at Massachusetts General Hospital, or in any other direction, we are committed to providing you the experience and network necessary to advance in your career.

## **Essential criteria**

- BS or MS in computer science, physics or engineering required (4+ years of experience in programming can be a substitute for this requirement)
- Proficiency in Python is required. Experience managing large-scale relational databases, managing containerization software such as Docker, and with web programming preferred.
- Comfortable using Linux environments and the terminal for running jobs non-interactively.
- Well-developed organizational and analytical skills, excellent written communication and interpersonal skills.
- An eagerness to learn new technologies and employ them in day-to-day usage.

# Desirable skills

We will consider applicants with any or all of the skills described below, or an ability to learn them independently.

- Familiarity with machine learning and deep learning packages such as PyTorch and TensorFlow.
- Experience in working with medical data.

#### Why work with us?

We believe that our research has real potential to improve the standard of care for patients worldwide. If you join us, you will become an integral part of an interdisciplinary team that values collaboration and teamwork above all else. We have a history of publications in high impact journals, and you will be encouraged and supported to contribute to that effort. Further, we believe that a healthy work-life balance is the key to a success academic life, and regularly take time out to go bowling, climbing, and cooking!

# How to apply

To apply for this position, please complete the application on Massachusetts General Hospital's website, <u>https://partners.taleo.net/careersection/ex/jobdetail.ftl?job=3084670&lang=en</u>. If you have any questions about the position, do not hesitate to send a message to <u>kalpathy@nmr.mgh.harvard.edu</u>

We are an equal opportunity employer and value diversity. We also know that the work of diversity and anti-discrimination extends past choices in hiring. We work every single day to make our lab an equitable and productive space for everyone, regardless of their race, religion, color, national origin, gender, sexual orientation, age, marital status, veteran status, or disability status.

