

## Introduction

We are QTIM (<https://qtim-lab.github.io>)— the Quantitative Translational Imaging in Medicine Lab at the Division of Artificial Medical Intelligence at the University of Colorado (CU) School of Medicine. Our team is a powerhouse of inter-disciplinary talent, comprising researchers from renowned institutions such as Harvard, MIT, Oxford, UCL, and CU Boulder. Our ranks include clinical ophthalmologists, computer and imaging scientists, programmers, and biomedical engineers. Together, we're forging ahead in the development of state-of-the-art machine learning algorithms and software tools.

## Data Scientist – Computer Vision and Machine Learning

You will be working in our growing Division of Artificial Medical Intelligence in Ophthalmology at The University of Colorado (CU) School of Medicine, focusing on developing novel machine learning algorithms and related systems for applications in medical imaging. By collaborating closely with clinicians to facilitate deployment of AI into clinical practice, you will be helping to create and maintain products that non-technical users can interact with, as well as dealing with large datasets that algorithms will need to process frequently.

### Essential Criteria

- Bachelor's degree in Computer Science or a related field.
- A combination of education and related technical/paraprofessional experience may be substituted for the bachelor's degree on a year for year basis.
- Two (2) years of experience in machine learning applied to computer vision and medical image analysis.
- Six (6) months of experience with full-stack development or cloud computing with distributed or disparate tools that need to be interconnected.

### Desirable Skills

- Master's degree in Computer Science or a related field.
- Experience working with medical imaging data such as fundus photographs, OCTs, computed tomography (CT) or magnetic resonance imaging.
- Track record of publishing research in top AI-related venues (NeurIPS, ICML, ICLR, AAAI, CVPR, MICCAI, etc.).
- Three (3) years of experience with Python, Numpy, Matplotlib, Pandas, Scipy, and Pytorch/TensorFlow.
- Candidates should have experience working in multidisciplinary teams (e.g., clinicians, software engineers, data scientists) to develop real-world medical AI applications.
- Good software engineering skills and familiarity with technologies such as Bash, Linux, Git, SQL, and Docker.

## **Why work with us?**

Collaboration and teamwork are core values of our lab. Together, we believe our interdisciplinary team can revolutionize clinical practice through cutting-edge AI and machine learning algorithms by harnessing a diverse array of patient data. By elevating clinical decision-making, we hope to create a future where clinicians are empowered in their decision making to the benefit of their patients.

Beyond the world of research, our location offers a lifestyle unlike any other. If you have a passion for hiking, skiing, climbing, and exploring the breathtaking Rocky Mountains, you've found your perfect match.

## **How to apply**

For more information or to express your interest, please do not hesitate to contact us. Send your resume and a compelling cover letter to:

Jayashree Kalpathy-Cramer: [jayashree.kalpathy-cramer@cuanschutz.edu](mailto:jayashree.kalpathy-cramer@cuanschutz.edu)

Steve McNamara: [steve.mcnamara@cuanschutz.edu](mailto:steve.mcnamara@cuanschutz.edu).

Praveer Singh: [praveer.singh@cuanschutz.edu](mailto:praveer.singh@cuanschutz.edu)

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.