

Post-Doctoral Scholar Positions in Medical Image Analysis and Computational Biology

Description:

The Computational Integrated Diagnostics (CID) Program in the Departments of Radiological Sciences and Pathology & Laboratory Medicine at UCLA is seeking several postdoctoral scholars with expertise in one of two areas: 1) machine learning and image analysis, or 2) computational biology. Successful candidates will work semi-independently under the supervision of the program PI to develop novel computational approaches for analyzing and integrating clinical data. In particular, successful candidates will have a focus on exploring the fusion of radiology, pathology, and omic information for assisting in diagnosis, treatment selection, and prognosis. Example research areas include: 1) methods for learning from weakly labeled data; 2) recurrent neural networks for modeling visual attention to automatically locate areas of interest in radiologic and pathologic images; 3) unsupervised feature generation techniques for integration with predictive models; 4) methods for translating voxel-wise labels to patient-level predictions; 5) techniques for implementing multi-modal frameworks that combine imaging, molecular, and clinical data; 6) methods for anomaly detection that allow for diagnostic decision support; 7) cancer growth pathway modeling; 8) the function of cancer genes; 9) cancer cell-cell and cell-matrix interactions; and 10) tumor immunology. Successful candidates are expected to conduct research, present results at scientific conferences, publish findings in peer-reviewed journals, and assist in grant preparation.

Requirements:

We seek highly qualified individuals who are highly motivated, flexible, detail-oriented, collaborative, and hold a commitment to research excellence. Candidates should have a PhD in Computer Science, Electrical Engineering, Computational Biology, Statistics, or a related field and have strong experience in at least one of the following areas: machine learning, image analysis, deep learning, computational anatomy, cancer computational biology, or computational biomodeling. Candidates with previous research experience working with medical images and having at least three years of experience using a deep learning framework, such as Tensorflow, PyTorch, Caffe, or Keras are highly desirable.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, sexual orientation, gender identity, disability, age, or protected veteran status. For the complete University of California nondiscrimination and affirmative action policy see: UC Nondiscrimination & Affirmative Action Policy.

To Apply:

Please email a cover letter explaining relevant work experience, CV, and the names and contact information for three references to:

Corey Arnold, PhD

Associate Professor

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