Postdoctoral Scholar: Machine Learning for Tumor Pathology

The Rajaram Lab (www.rajaramlab.org) in the Lyda Hill Department of Bioinformatics at UT Southwestern Medical Center is looking for a full-time postdoc to develop novel machine learning approaches for analyzing histopathological tumor images.

Our lab's primary focus is understanding how the spatial organization of tumors reflects their molecular biology and predicts future behavior. The complexity of tumor architecture has meant that this important window into cancer biology remains largely unused. The combination of classical machine learning and image analysis, which has proven successful in the past, will be inadequate to deal with the immense size and relative scarcity of tissue samples. We hope to unravel tumor organization by incorporating amassed cancer biology knowledge/data as a framework around which state-of-the-art machine learning techniques are deployed.

We are looking for smart and motivated postdocs with the ability to innovate beyond existing algorithms and the intellectual curiosity to explore a new problem domain. The ideal candidates will have:

- A Ph.D. in computer science, physics or related field providing a firm analytical background.
- Publications demonstrating algorithmic innovation.
- Strong programming ability and past experience with machine learning.

Previous experience in biology and/or image analysis are a definite plus, but not mandatory. Outstanding candidates with a strong cancer biology/pathology will be considered if they have exhibited a commitment to master machine learning.

Through close collaborations with pathologists and cancer biologists our lab offers truly multidisciplinary training. You will work on problems at the cutting edge of both machine learning and biology in a computer science department at a leading academic medical center. We are a young lab in a new department committed to rethinking the process of research in this age of startups. We are willing to innovate not just in our science but also in the way we hire, compensate and interact (e.g. open floorplans). Finally, our department provides world-class computational (https://portal.biohpc.swmed.edu/) and bioinformatics (http://www.utsouthwestern.edu/labs/bioinformatics/) infrastructure so that your efforts are focused solely on scientific innovation.

Please apply by email to Dr. Rajaram (satwik.rajaram@utsouthwestern.edu) and include:

1) Your CV
2) A statement of research accomplishments and interests
3) Contact information for 3 references

UT Southwestern Medical Center is an Affirmative Action/Equal Opportunity Employer. Women, minorities, veterans and individuals with disabilities are encouraged to apply.

UT Southwestern
Medical Center