

A Postdoctoral Fellow Position at University of Washington

Multiple postdoctoral fellow positions are available in the lab of Prof Su-In Lee in the Departments of Computer Science & Engineering (CSE) and Genome Sciences (GS) at the University of Washington in Seattle.

The Lee lab is interested in developing computational approaches based on machine learning and statistics to address key problems in biology and medicine. Current research includes *Systems Medicine* – an emerging field that aims to infer biological networks underlying complex disease processes by integrating various types of high-throughput biological data; and to define clinically detectable molecular "fingerprints" resulting from the disease-perturbed biological networks to detect and stratify various pathological conditions for personalized and predictive healthcare. Specific research themes include:

- Scalable ML algorithms for high-dimensional data analysis
- Predictive medicine
- Functional genomics towards personalized health care – predicting sensitivity to chemotherapy drugs in AML treatment based on functional genomic data
- Systems genetics and evolution – system-level understanding of the effect of individual or evolutionary sequence variation on complex biological traits

These research projects are multidisciplinary in nature and are being conducted in an excellent environment in which to learn and integrate computational and clinical approaches to human disease. The University of Washington is one of the top universities in all relevant fields – computational biology, genetics/genomics, medicine, AI/ML and statistics/biostatistics.

Research projects will provide an opportunity to develop a working knowledge of Medicine and specific projects with collaborators in the Departments of GS, CSE, Medicine, Pathology, Fred Hutchinson Cancer Center, and Group Health. This tight collaborative network facilitates access to primary data, and experimental and clinical settings in which to validate and extend new hypotheses generated by our research. The postdoctoral fellow may be co-mentored by Prof Su-In Lee and the project-specific collaborators.

For more information including active research projects in the lab and the list of collaborators, please visit our lab project website:

<http://suinlee.cs.washington.edu/>

Competitive candidates will have received a PhD in computer science, electrical engineering, statistics, biostatistics, computational biology, genetics, or a related field with solid computational background. A background in machine learning, statistics, with experience in analyzing large-scale genomic datasets is a plus. For a candidate with a strong quantitative background and solid programming skills, it is not essential to have experience with biological problems.

To apply, please email Prof. Lee (suinlee@uw.edu) your updated CV, including a publication list and names of at least three references, with the subject line 'Post-doctoral Fellowship Application'.