

Job title: Harvard Medical School – Postdoctoral Research Associate Position at the Center for Biomedical Informatics

Summary:

Imagine a dynamic dataset that encompasses comprehensive information about a patient in the health care system: what diseases they have, their genomic sequence, their social media messages (e.g., tweets and likes), and where they live. How would you – a data hacker—store, retrieve, and analyze this information to drive biomedical discovery to find a new way of predicting disease or even a new therapy for a disease? The Center for Biomedical Informatics (CBMI, https://cbmi.med.harvard.edu) at Harvard Medical School is looking for a data engineer to build cutting edge platforms and data infrastructure to enable large-scale data-driven research to address this question. We aim to integrate diverse data sources from geotemporal information (e.g., HealthMaps.org and EPA AirData), individual genomic sequence, social media data, and health claims information to paint a comprehensive picture of individuals who are sick and healthy.

Responsibilities:

The Research Associate will be responsible for data harmonization and developing APIs to enable integration across diverse data modalities. The Research Associate will implement scalable statistical machine learning algorithms for prediction and discovery of clinical, genetic, and environmental factors related to disease.

The diversity of subject matter will require a creative mind and a candidate capable of deploying imaginative strategies and who is dedicated to solving complex and challenging problems within an interdisciplinary environment.

Requirements:

Candidates must have a PhD in computer science, mathematics, physics, biomedical informatics, bioinformatics, computer science, or a related quantitative field.

Preferences:

Preferred requirements for this position include experience designing large software applications and infrastructure to store, retrieve, and analyze large datasets. Industry experience with R, Python, SQL (Oracle), JavaScript is preferred. Experience in hacking with cloud technologies (e.g., Amazon, Hadoop) is a big plus and preferred.

Terms:

The position is available immediately and can be renewed annually.

How to apply:

Email applications including curriculum vitae, summary statement of personal objectives the names and email addresses of 2-3 references to Chirag Patel (chirag patel@hms.harvard.edu).

Harvard Medical School is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.

