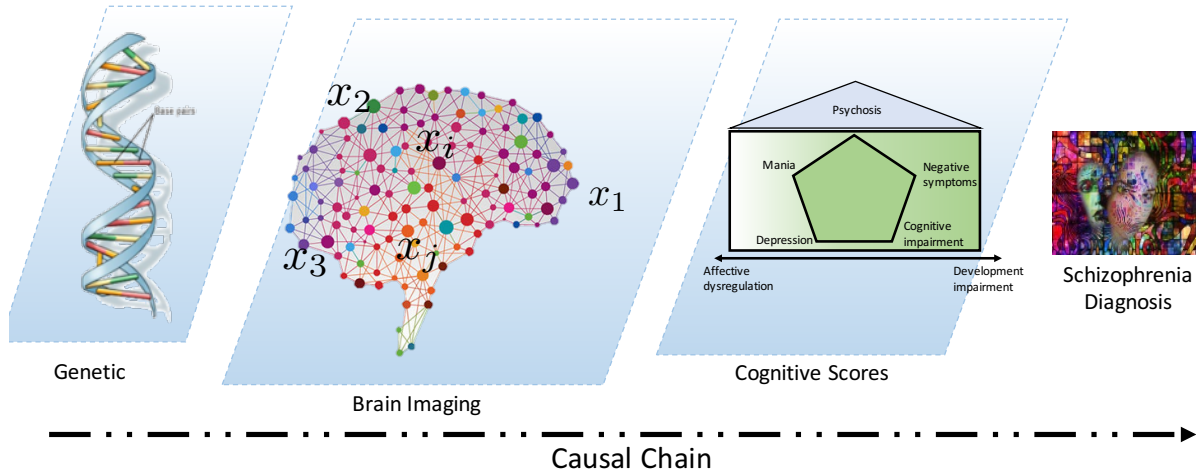




Postdoctoral associate sought for developing statistical models for imaging-genetic data



Job description

We are looking for a self-motivated, quantitative scientist with a strong background in applied statistics and machine learning who is genuinely interested in working on an exciting project in Big Data in Healthcare, specifically imaging-genetics. The objective of this project is to develop a statistical model relating population genetics and neuroimaging analysis using state-of-the-art graphical models and causal inference. An example is the characterization of mental diseases such as schizophrenia. We have unique, large-scale datasets consisting of thousands of subjects each with genotype, brain image measurements, and neurocognitive scores. The position will focus on developing a general statistical model that incorporates information from multiple sources of public and private data and across different modalities of data (imaging, genetic, gene expression, etc.) to infer causal relationship between gene and abnormal variations in brain structure. The project is a multi-disciplinary research collaboration between multiple universities and industry with significant potential for producing high impact publications. The candidate for this position is expected to have strong background in machine learning, advanced statistical modeling and data analysis and possess excellent writing and communication skills. Having experience in biostatistics and particularly analyzing genetic and imaging data is a big plus.

Responsibilities include development of the algorithms, data management, statistical data analysis, collaboration with scientists in multi-disciplinary teams, and presenting findings at the international conferences, and publishing journal articles.

The position is supported for 2 years. Candidates will be appointed for one year, with a second-year extension possible based on progress. The postdoc will have a joint appointment between the University of Pittsburgh and the Carnegie Mellon University. Interested applicants should directly contact Dr. Kayhan Batmanghelich: kayhan@pitt.edu.