The Health and AI lab (HAIL) at Stevens Institute of Technology is seeking multiple postdoctoral researchers interested in combining computational and cognitive sciences. HAIL is directed by Samantha Kleinberg and funded by numerous grants from the NIH, NSF, and James S. McDonnell foundation. We work on better understanding and using observational data, motivated by real problems in healthcare. For researchers interested in working with real-world data, our collaborations with clinicians at Columbia University and epidemiologists at NYU allow for unique access to patient data along with the opportunity to have a tangible impact on patient care.
Our primary focus is causal inference and explanation, including developing methods that handle the challenges of complex real-world data and investigating how people use the output of causal inference to make decisions. We especially seek researchers focused on the second part of this mission: how can we make machine learning output understandable and actionable to non-experts?

Our current projects include:

\* Causality in complex systems: We’re developing methods for causal inference across time and space, at multiple scales. The project includes better understanding nonstationarity and the evolution of causality over time, and expanding causal inference beyond variables to understand causes for changes in system properties.
\* Mobile health/device development: Recognizing when, what, and how much people eat from body-worn sensors (audio and motion). We are working on automating calorie counting and developing unobtrusive devices to do this.
\* Decision-making with causal information: We investigate how people use new information to make decisions in daily life, and whether causal information can lead to decisions that are more consistent with goals.
Candidates are sought with expertise in a subset of the following areas:
- Causal inference and/or reasoning
- Analysis of time series data
- Decision-making

Requirements include: publications in major cognitive science or AI/ML venues, and a PhD in Cognitive Science, Computer Science, or a related field. Positions are initially for 1-year, with funding available for up to four years.

To apply:

Please send a statement of interest, cv, 2-3 representative publications, and email addresses for 2-3 references to samantha.kleinberg@stevens.edu .
More information about the Health and AI Lab, directed by Samantha Kleinberg, is available at: [www.healthailab.org](http://www.healthailab.org/) .