



# Department of Computer Science

## Data-Informed Interaction Learning

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AWS AI Labs

**Hosted by Senjuti Basu Roy**

**Date:** Tuesday, March 21, 2023

**Refreshments:** 2:45 PM – 3:00 PM

**Time:** 3:00 PM – 4:30 PM

**Location:** GITC 3600 (3rd Floor Seminar Lecture Hall)

**Zoom Link:** <https://njit-edu.zoom.us/j/3662586376?pwd=Q2NTYIFUNU85MzBmZXBBQXcxKzdXUT09>

<https://cs.njit.edu/seminars>

### **Abstract:**

Users in their different roles interact with data systems to seek information. Typical information seeking paradigms such as search and recommendation, depend on a crystal-clear definition of an information seeking task to operate. In reality, most data-centric tasks are subjective which require a sequence of interactions to manifest and clarify. Interacting with data systems is a tedious task and users need to receive guided recommendations from the system to optimize their interactions when dealing with subjectivity. In this talk, we focus on the challenge of "subjective needs" and "multi-shot tasks", and review (1) how the diverse and heterogeneous set of user interactions can be formalized and represented in the form of a unique model, and (2) how data systems can leverage the interaction model to assist users in their interactions by disambiguating their needs and guiding users through their information seeking journey until landing on their ideal target. We discuss real-world use cases of formalizing and learning interactions, both in academia and industry, whose core objective is to help users interact with data systems more effectively. We also discuss future directions of interaction learning, such as incorporating domain knowledge and multi-environment exploration.

### **Bio:**

Behrooz is an Applied Scientist in AWS AI Labs. Prior to Amazon, he held positions in Naver Labs Europe, the Grenoble Alpes University, and the Ohio State University. He received his PhD in CS from the University of Grenoble Alpes, France, in 2015. His research focuses on Human-in-the-Loop Data Analytics spanning over different research areas such as Data Mining, Databases, Visual Analytics, and Machine Learning. He has published more than 40 papers in top-ranked international conferences and journals including VLDB, SIGMOD, CIKM, TKDE, and CHI.