Senior Project / Senior Design

Faculty Adviser Profile

**Faculty member: Beiyu Lin**

I will teach behavior modeling in Spring 2021 that focus on studying spatio-temporal data for human mobility, transportation, and mouse movement.

**Area: user behavior: mouse movement patterns**

* We will focus on user behavior modeling by studying mouse movement patterns and the differences among different subgroups.
* We will use the publicly available data and collect data from users.
* We will utilize current machine learning methods as well as design new methods.
* The findings will open up the possibility to design adaptive systems that will reconfigure each web page to provide personalized framework and content.

**Area: crowd flow: traffic / transportation management**

* We will focus on GPS data collected from car sensors to study the mobility patterns of the traffic.
* We will use the data collected from different cities to study the crow flow patterns and its changes at different time (e.g., before and during pandemic).
* We will employ state-of-art machine learning algorithm for this study.
* The findings will open up the possibility to design adaptive planning or scheduling systems that will help us stay active (e.g., dining out and go to the gym) and help the economic recovery while feel safe via social distancing