FACULTY MENTOR
Mi, Chris

PROJECT TITLE
Battery parameter identification

PROJECT DESCRIPTION
The current battery management systems are not able to perform detailed diagnosis of the battery cells online due to the large amount of data and computational power required. In order to solve the problems, we will develop a technology to calculate battery cell characteristics based on the operating data of the vehicle. With this technology, battery cell parameters can be assessed periodically, without the need of performing cycling test which is time consuming. The algorithm will be based on cloud computing with data collected from the operation of the vehicles. The algorithm will include two parts: the first part is a machine learning algorithm to identify the appropriate data from the daily operation of the vehicle. The second part is to estimate the battery parameters from the identified data.

INTERNS NEEDED
1 Students (either BS or MS)

PREREQUISITES
Some background knowledge in machine learning.