



## Data-driven assessment of batteries' charge

Modern electrical grids require batteries which can act as buffers to store excess energy when supply is higher than demand and release the energy when demand is higher than supply. For this purpose, one needs to know the state of health and state of charge of a battery given the current operating load and environment. This project aims to use data-driven machine learning methods to determine these parameters and based on these results use physics-informed neural networks to further improve the existing models.

**Requirements:** Prior experience and a strong interest in machine learning is recommended. Creativity, and experience with programming, elementary physics and simulation are advantageous.

**Interested? Please contact us for more details!**

### Contact

- Andreas Plesner: [aplesner@ethz.ch](mailto:aplesner@ethz.ch), ETZ G95