

1125-68-1556      **Kim Laine\*** ([kim.laine@microsoft.com](mailto:kim.laine@microsoft.com)). *Machine Learning on Encrypted Data*.

Modern machine learning techniques can be used to build incredibly accurate predictive models for various tasks in health, finance, and other industries. Conversely, given such a model, anyone can use it to extract valuable information from their private data.

In this talk we focus on new results in using machine learning models (inference) on private encrypted data. Time permitting, we will also comment on the significantly more difficult problem of training models in a privacy-preserving way. (Received September 18, 2016)