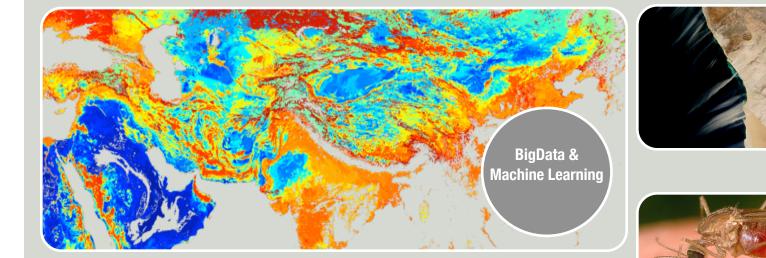
Workshop

DATA DRIVEN DECISIONS

BIG DATA AND MACHINE LEARNING FOR SOCIETAL BENEFIT AND SCIENTIFIC DISCOVERY



BIG DATA IN SERVICE OF SOCIETY

Machine learning and multiple massive Big Data sets can be of great use for a wide variety of scientific, societal and business applications.

The World Health Organization just issued a report stating that seven million people died in 2012 from pollution related issues. Each year there are an estimated 219 million cases of Malaria. Eleven states have recently made drought declarations. Every year the US spends between \$1 and \$2 billion fighting fires. Issues such as these are of massive societal and personal relevance. Big Data and machine learning can provide invaluable tools for both improved understanding and making data driven decisions and policy.

This workshop will give an introduction to a wide range of Big Data applications of major scientific and societal importance such as environmental health, drought and water issues, fire.

The practical tools introduced can be readily used in a wide range of applications from research to real time decision support. The data used comes from a wide variety of sources including scientific instrumentation, social media, remote sensing, aerial vehicles and the internet of things.



