# Engaging the Public in Data Science



Isabelle Guyon

Adjunct Professor, Center for Informatics and Bioinformatics

### **CURRENT RESEARCH**

## Initiating a collaborative effort to answer diverse needs in data science

Dr. Isabelle Guyon, of New York University, is a highly-cited informatics researcher who currently facilitates competitions in machine learning to apply research to data modeling. You may think of predictive models as tools to help weather forecasting or stock market predictions. But amazingly enough, the same type of mathematics is also applicable to information retrieval with an Internet search engine, voice and face recognition, and tools to aid medical diagnosis. For example, in her recent research Dr. Guyon directed her interest to gesture recognition from video data, which is applicable to interpreting sign language used in communication between hearing impaired people and for signalling from a distance, in silent environments, noisy environments, or under water. Last year, Dr. Guyon collaborated with CERN physicists to bring to the attention of the machine learning community the problem of predicting which events in a collider indicate the occurrence of certain particles, such as the famous Higgs Boson. Through her nonprofit group ChaLearn (Challenges in Machine Learning) Dr. Guyon directs research into these important applications by designing "challenges" to provide incentive for scientists to think about these compelling problems.

This interesting and unique turn in Dr. Guyon's career came with the realization that collaboration between an open pool of contributors would efficiently breed enriched innovation. After contributing multiple key inventions to the machine learning field herself (she is a co-inventor of a famous algorithm called "Support Vector Machines"), Dr. Guyon was struck by the thought that if she presented problems that she was trying to solve to a large number of scientists in...

#### **AFFILIATION**



New York University

### **EDUCATION**

- M.S., in Electrical Engineering, 1985, Pierre et Marie Curie University, Paris, France
- Ph.D., in Physical Sciences, 1988, Pierre et Marie Curie University, Paris, France

#### **AWARDS**

• Fellow of ACMI since 2011

#### **RESEARCH AREAS**

Technology, Computational Sciences / Mathematics, Informational Sciences / Internet, Materials Science / Physics

### **FUNDING REQUEST**

Your contributions will support the \$100K necessary to organize and carry out each individual ChaLearn competition. By choosing to donate, you will be funding the data collection and preparation, the development of software and tutorial materials to get the competitors started, prizes needed to incentivize participation and travel grants to support students to present their discoveries at conferences. Sponsors will be invited to attend these conferences to watch their donations unfold into winning solutions that will push the potential of the technological world as we know it.

Copyright © 2017 / Benefunder 4790 Eastgate Mall. Ste 125, San Diego, CA 92121 / info@benefunder.com / (858) 215-1136