Teaching
Alexander Gammerman

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I have taught at all levels of Computer Science at different Universities mainly in England and Scotland but also in Spain, France and Russia. My aim has been to teach students a mathematical/computational culture, i.e. how to approach a problem and solve it in a certain logical way, rather than to "drill down"into a specific topic. I have taught a wide variety of different courses from first year students to Master level students and from theory of computation to very practical programming courses. I was involved (as HoD) in several reviews of Computer Science curriculum. I developed myself or with my colleagues six new courses: Inference Systems; Inductive Learning; Intelligent Decision-Making Systems; Bayesian Inference; Computational Finance; Computer Learning and participated in developing three teaching programmes, including a very successful Business Information Systems programme (with School of Management). I was invited and gave courses in Machine Learning in University of Madrid (Spain) and University of Paris 9 (France).

I taught the following courses:

- CS120 (Autumn 1993, Autumn 1994): C++ programming course.

- CS356 (Autumn 1995 and 1996): developed a new course on Intelligent Decision Systems (postgraduate course, Spring 1997 and Spring 1998): developed and taught this course.

- Business Information Systems MSc course (Spring 1999): developed and taught (jointly with V. Vovk) a course on Intelligent Decision Systems.

- CS392 (Spring 1998, Spring 1999, Autumn 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009) a course on modern machine learning techniques (SVM, transduction, algorithmic randomness).

- CS393 (Spring 2001, 2002, 2003, 2004, 2005): a course (jointly with V. Vovk) on Computational Finance; includes mathematical and computational models of financial markets and numerical methods for valuation of derivative securities.

- Supervising final year projects in machine learning.

- Supervising MSc dissertations in Knowledge-Based Systems at Heriot-Watt University, 1984 – 1993.

- Supervising final projects of MSc in Big Data students – 2014.