

Selected Grants and Patents

Alexander Gammerman

Selected Grants

- Engineering and Physical Sciences Research Council (EPSRC), grant GR/L35812, PI. “Support Vector and Bayesian Learning Algorithms: Analysis and Applications” (with V. Vovk and V. Vapnik), £142,360*. 1997–2000.
- Engineering and Physical Sciences Research Council (EPSRC), grant GR/M16856, PI. “Comparison of the Support Vector Machine and Minimum Message Length methods for induction and prediction” (with V. Vovk and C. Wallace), £132,787* 1999–2002.
- Engineering and Physical Sciences Research Council (EPSRC), grant GR/R46670/01, PI. “Complexity Approximation Principle and Predictive Complexity: Analysis and Applications” (with Prof. V. Vovk), £142,996*, 2001–2004.
- Biotechnology and Biological Sciences Research Council (BBSRC), grant 111/BIO14428, PI. “Pattern Recognition Techniques for Gene and Promoter Identification and Classification in Plant Genomic Sequences” (with J. Hancock and V. Solovyev), £145,210*, 2002– 2005.
- European Union (EU), grant IST-1999-10226, PI. “EurEdit: The Development and Evaluation of New Methods for Editing and Imputation” (with European partners from Italy, the Netherlands, Switzerland, Portugal), RHUL part: £86,809*, 2000–2003.
- Royal Society grant, PI, “Efficient randomness testing of random and pseudorandom number generators” (with B. Ryabko), £4,961, 2003–2005.
- Medical Research Council (MRC), grant G0301107 (S505/65), PI. “Proteomic Analysis of the Human Serum Proteome” (with I. Jacobs, M. Waterfield, R. Cramer, V. Vovk, S. Gayther, Z. Luo, U. Menon, J. Timms), RHUL part: £170,091*, 2005–2008. (total funding £959,954).
- QinetiQ grant: “Automated Target Identification”. £47,000 2006–2007. (total funding £47,000).

- Research Promotion Foundation of Cyprus. “ASPIDA project: Development of New Conformal Prediction Methods with Applications in Medical Diagnosis”, PI, (with H. Papadopoulos and V. Vovk), £30,770, 2007–2010.
- Engineering and Physical Sciences Research Council “Practical competitive prediction” (with V. Vovk and Y. Kalnishkan), co-PI, £406,000, 2007–2010.
- Department for Environment, Food and Rural Affairs (Defra), Veterinary Laboratories Agency, “Application of Pattern Recognition techniques to Bioinformatics.” PI, £82,000, 2007–2010.
- European Union EU FP7 programme: “Post-translational modification, O-PTM”, HEALTH-2007-2.4.1-2: Translating clinical ‘omics’-technology (genomics, proteomics, metabolomics) into innovative cancer biomarkers aiding in early diagnosis, prognosis and treatment selection of cancer patients. (with Dr Joy Burchell, Prof Joyce Taylor-Papadimitriou, KCL; Z.Luo and V.Vovk from RHUL and 5 other institutions), PI, £193,046, 2008–2011. (total funding £5 mln euros).
- Medical Research Council (MRC) Application of conformal predictors to functional magnetic resonance fMRI imaging research; PI, £85,581, 2009–2010.
- Royal Society grant, ”Trace Detection with Confidence for Odor Capture Hybrid Sensor System”, co-PI, (with Z.Luo), £7,800, 2009–2010.
- Department for Environment, Food and Rural Affairs (Defra), Veterinary Laboratories Agency (VLA). Machine learning algorithms for analysis of large veterinary datasets; PI, £52,000, 2010–2013.
- BBSRC (and EU) programme: Living with uninvited guests: comparing plant and animal responses to endocytic invasions (ERASysBio). BBSRC project (with VLA, SGUL, Spain, Germany and France); co-PI; over £700,000 for RHUL part, 2010–2013. (total funding 5,200 000 euros).
- Zhejiang University, China: Machine learning methods for coal quality analysis based on NIR technology, 2011–2013 (co-PI with Z.Luo).
- Thales UK; Development of automated methods for helping detection of anomalous behaviour. £85,000; 2012–2015.
- EPSRC: Mining the Network Behaviour of Bots (with L.Cavallaró, V.Vovk, H.Shanahan and Z.Luo); £680,623 from 1-06-13 for 3 years until 2016.
- EPSRC iCASE award: ”Applications of Machine Learning using Privileged Information”; 2015 –2018.

- EU Horizon 2020 grant: "Exascale Compound Activity Prediction Engine"; 369,943 euros; 2015 – 2018.
- AstraZeneca, Sweden grant "Machine Learning for Drug Discovery"; £395,762; 2017 – 2020.

Other publications

- Learning by Support Vector Machine (with V. Vovk). Tutorial. Uxbridge, Middlesex: UNICOM Seminars Ltd., 1998.

Patents

Data classification apparatus and method thereof (with V. Vovk).

- European Patent Application No. 99 954 200.4: the application was allowed in July 2004.
- US Patent Application No. 09/831,262: allowed.