

Anthony C. Constantinou

Curriculum Vitae, October 19, 2018

DOB: 01/07/1984

Nationalities: (Dual): Cypriot, British

Languages: Greek (Native), English (Fluent)

Web: www.constantinou.info

Address: Room CS332A, School of EECS, Queen Mary University of London, London, UK E1 4NS.

E-mails: a.constantinou@qmul.ac.uk
anthony@constantinou.info

SUMMARY

- **Lecturer** (Assistant Prof) at [Queen Mary Univ. of London](#).
- **Head** of the Bayesian Artificial Intelligence Research Lab.
- **Principal Investigator** on EPSRC UKRI Fellowship “[Bayesian Artificial Intelligence for Decision Making under Uncertainty](#)”.
- **EPSRC Fellow**.
- **Turing Fellow**, The Alan Turing Institute.
- **Editor** of [PLoS ONE](#).
- **EPSRC Associate College Member**.
- **Consultant** in Rating Systems & Bayesian Networks

EXPERIENCE

Jan 2017 to Present: Lecturer (Assistant Professor) in Machine Learning and Data Mining, and **Head** of the Bayesian Artificial Intelligence Research Lab, School of EECS, Queen Mary University of London, UK.

- Head of the Bayesian Artificial Intelligence Research Lab.
- PI on EPSRC Fellowship “[Bayesian Artificial Intelligence for Decision Making under Uncertainty](#)”.
- Turing Fellow, The Alan Turing Institute.
- Co-Investigator on MRC project “[Population Genomics and Health Data Science](#)”.
- Module leader and Lecturer in Data Analytics (MSc) – up to 118 students.
- Lecturer in Data Mining (BSc & MSc) – up to 165 students.
- 2nd Examiner in Machine Learning (BSc & MSc)
- 1st Supervisor for: 1x Postdoc, 1x RA, 2x PhD, 1x MRes, 6x MSc, 9x BSc.

Jul 2015 to Present: Consultant in Ratings Systems and Bayesian Networks

Collaborating with organisations world-wide primarily in, but not limited to, the sports betting industry. Direct and indirect collaborators include:

- **2012 - ongoing: [Agena Ltd](#) (UK):** Risk analysis and Decision support using Bayesian Network technology to model complex, risky problems and to improve decision support.
- **2015 - ongoing: [Individuals](#) in the UK and [Singapore](#):** Intelligent decision making in sports betting, including football, darts, and tennis.
- **2017 - 18: [JFE Steel Corporation](#) (Japan):** Reliability and risk management of steel production processes for the 2nd largest Japanese steel manufacturer with more than 60,000 employees.
- **2015 - 16: [Venture Sports & Events](#) (Thailand):** Intelligent decision making in Asian Handicap betting in UK, EU, and Asian football gambling markets.
- **2014 - 16: [ICRAF World Agroforestry Centre](#) (Kenya):** Decision analysis in agricultural project management.

Nov 2015 to Present: Property Investor and Portfolio Landlord

Actively involved in financial planning, negotiating, and risk management in property investment projects and property portfolio management in London and Cyprus.

Jul 2014 to Jan 2017: Post-Doctoral Research Assistant, School of Electronic Engineering and Computer Science, Queen Mary University of London, UK.

Worked on [ERC](#) project about improving evidence-based decision making for real-world critical decision problems using Bayesian networks.

Sep 2012 to Jul 2014: Post-Doctoral Research Fellow, Barts and The London School of Medicine and Dentistry, Queen Mary University of London, UK.

Worked on [NIHR](#) project on Bayesian networks for risk assessment and risk management in forensic psychiatry.

Jul 2014 to Jul 2015: Associate Consultant (P/T), Agena Ltd, London, UK.

Decision Science consultant using Bayesian network technology and visualisation to solve complex risky problems and improve decision making processes for customers world-wide and across a number of industry sectors.

Oct 2009 to May 2013: Teaching Assistant (P/T), School of Electronic Engineering and Computer Science, Queen Mary University of London, UK.

Bayesian Decision & Risk Analysis (BSc & MSc), Software Engineering (BSc & MSc), and Procedural Programming (BSc).

Jun 2012 to Sep 2012: Decision Scientist (Internship), Agena Ltd, London, UK.

Strategic planning and investment decision making.

Oct 2009 to Sep 2012: PhD Researcher, Queen Mary University of London, UK.

Bayesian networks for prediction, risk assessment and decision making. School of EECS.

2000 to 2002 and 2004 to 2008: Various summer jobs as web developer and sales assistant.

Jul 2002 to Aug 2004: Soldier, Greek-Cypriot National Guard.

QUALIFICATIONS

- **2012: PhD** in Bayesian Networks at Queen Mary, University of London, UK.
- **2009: MSc** (with Distinction) in Artificial Intelligence with Robotics, University of Hertfordshire, UK.
- **2008: BSc** (Hons) in Computer Science, University of Hertfordshire, UK.
- **2019:** Postgraduate Certificate in Academic Practice (**PGCAP**), Queen Mary University of London.
- **2012: Certificates** in Probabilistic Graphical Models, Game Theory, Model Thinking, Artificial Intelligence, and Machine Learning, by Coursera.
- **2009: Certificate** in Electronic Engineering & Computer Science Teaching Skills, Educational and Staff Development, University of London, UK.
- **2008: Certificate** in CCNA Exploration: Network Fundamentals. Cisco Networking Academy, UK.

HONOURS, AWARDS & GRANTS

- **2018:** Appointed Turing Fellow by [The Alan Turing Institute](#). Contribution by the institute: 5% salary contribution per annum for research time plus allowance for travel.
- **2018:** Principal Investigator on EPSRC UKRI Innovation Fellowship project "[Bayesian Artificial Intelligence for Decision Making under Uncertainty](#)". EPSRC contribution £475,818. Full economic cost: £594,773. Grant Ref: [EP/S001646/1](#). Project period: Jun 2018 to Jun 2021. Project description [PDF](#).
- **2018:** Ranked 2nd in the international special issue competition *Machine Learning for Soccer* hosted by the [Machine Learning](#) journal. Published a [paper](#), which describes the model, in the [Machine Learning](#) journal.

- **2017:** Co-Investigator on project *Population Genomics and Health Data Science*, under theme *Machine Learning and Artificial Intelligence*. MRC (UKRI Innovation / Rutherford Fund Fellowships) contribution: £857,289. Full economic cost: £1,071,611. Project period: Feb 2018 to Feb 2021.
- **2016:** Selected to present at the [SET for BRITAIN](#) research exhibition, Mathematical Sciences section, to the members of both Houses of Parliament held at the House of Commons, Parliament, Westminster, London, UK.
- **2013:** PhD thesis nominated by the School of EECS for the [CPHC/BCS Distinguished Dissertations 2013/2014 competition](#), managed by *The council of Professors and Heads of Computing* (CPHC) and *British Computer Society* (BCS).
- **2012:** Grant of €1,000 by the [Open University of Cyprus](#) to work on the research project entitled "*Management of Myocardial infarction patients in Cyprus, Greece and Albania: A regional comparative study*".
- **2012:** [ImpactQM](#) scholarship and 3 months funding, from 01/06/2012 to 31/08/2012, by the [EPSRC Knowledge Transfer Account \(KTA\)](#) for training and industrial collaboration during PhD studies. *EPSRC KTA Scheme 1*, award of £4,798.
- **2009:** Full 3.5-year PhD scholarship and funding by the [EPSRC](#). The award covered PhD tuition fees, plus a yearly stipend of £15,590. Submitted PhD thesis in 2 years and 10 months.
- **2009:** Award of Distinction for MSc in Artificial Intelligence with Robotics by the University of Hertfordshire, UK.

REVIEWING, EDITORIAL & CONFERENCE ORGANISATION

- **Since Jul 2018:** Associate College Member of the [EPSRC](#).
- **Since Mar 2018:** Editor of [PLoS ONE](#).
- **2018:** Programme Committee, 5th Workshop on *Machine Learning and Data Mining for Sports Analytics*, *European Conference on Machine Learning and Principles and Practice on Knowledge Discovery in Databases* (ECML/PKDD), 10–14 December, 2018, Dublin, Ireland.
- **2018:** Programme Committee, 3rd International Conference on *Soft Computing and Data Mining*, 6–8 February, 2018, Senai, Malaysia.
- **2016:** Invited Programme Participant, *Probability and Statistics in Forensic Science*, 18 Jul – 21 Dec, 2016, Isaac Newton Institute for Mathematical Sciences, University of Cambridge, England.

PEER-REVIEWING ACTIVITY (Ranked by Distinct Papers/Proposals Reviewed - DPR)

| # | Journal / Conference | DPR | # | Journal / Conference | DPR |
|----|---|-----|----|--|-----------|
| 1 | Knowledge-Based Systems | 8 | 24 | International Journal of Sport Finance | 1 |
| 2 | Artificial Intelligence in Medicine | 7 | 25 | Symmetry | 1 |
| 3 | PLoS ONE | 8 | 26 | International Journal of Sport Finance | 1 |
| 4 | Expert Systems with Applications | 3 | 27 | Central European J. of Operations Res. | 1 |
| 5 | Journal of Sport Sciences | 2 | 28 | J. of Forensic Science & Legal Medicine | 1 |
| 6 | Decision Support Systems | 2 | 29 | Games | 1 |
| 7 | Journal of the Royal Statistical Society | 2 | 30 | Journal of the Royal Society Interface | 1 |
| 8 | Journal of the Operational Research Society | 2 | 31 | Engineering Sustainability | 1 |
| 9 | 5 th Work. on ML & Data Mi. for Sports An. | 2 | 32 | European J. of Operational Research | 1 |
| 10 | Machine Learning | 1 | 33 | European Journal of Applied Mathematics | 1 |
| 11 | Data Mining and Knowledge Discovery | 1 | 34 | Current Bioinformatics | 1 |
| 12 | IEEE Trans. on Knowledge and Data Eng. | 1 | 35 | 3 rd Int. Conf. on Soft Comp. and Data Min. | 1 |
| 13 | IEEE J. of Biomedical and Health Inform. | 1 | 36 | Sports | 1 |
| 14 | Statistics and Computing | 1 | 37 | Recent Patents on Computer Science | 1 |
| 15 | Journal of Quantitative Analysis in Sports | 1 | 38 | International Journal of Geo-Information | 1 |
| 16 | Journal of Risk and Reliability | 1 | 39 | Environments | 1 |
| 17 | Journal of Applied Statistics | 1 | 40 | Sustainability | 1 |
| 18 | International Journal of Forecasting | 1 | 41 | The Open Sports Sciences Journal | 1 |
| 19 | Journal of Forecasting | 1 | 42 | Operations Research Perspectives | 1 |
| 20 | Information | 1 | 43 | 2 nd Int. Conf. on Comp. Sci. and App. Eng. | 1 |
| 21 | Comp. Methods and Programs in Biomed. | 1 | 44 | Int. J. of Risk Assessment and Manag. | 1 |
| 22 | Int. J. of Sport Manag. and Marketing | 1 | | | |
| 23 | Quart. Review of Economics & Finance | 1 | | TOTAL | 71 |

PUBLICATIONS

| | |
|---------------------------------|-----------|
| Google <i>h</i>-index: | 13 |
| Google <i>i10</i>-index: | 14 |

Up to date citation index since 2012 [here](#)

Publications are sorted by year as either *Journal* (**J**), *Conference* (**C**), *Academic Technical Report* (**ATR**), *Industry Technical Report* (**ITR**), or *Thesis* (**T**).

2018

- J** [1] **Constantinou, A. C.** Learning DAGs with Temporal Information. *Under review.*
- J** [2] Okagbue, H. I., **Constantinou, A. C.**, Atayero, A. A., Oguntunde, P. E., Opanuga, A. A., Erundu, E. C., Eze, G. A., Ijezie, O. A. Regional distribution of football clubs in English top flight league. *Under review.*
- J** [3] **Constantinou, A.**, Fenton, N., & Neil, M. How do some Bayesian Network machine learned graphs compare to causal knowledge? *Under review.*

| | |
|-----|--|
| ITR | [4] Constantinou, A. (2018). As assessment of set-based ratings in capturing player ability in tennis. <i>Deliverable Technical Report under Collaboration NO:23.20180911.</i> |
| ATR | [5] Constantinou, A. (2018). Bayesian Artificial Intelligence for Decision Making under Uncertainty. <i>Engineering and Physical Sciences Research Council</i> , EP/S001646/1 . [PDF] |
| J | [6] Constantinou, A. (2018). Dolores: A model that predicts football match outcomes from all over the world. <i>Machine Learning</i> , 1-27. [Free view , DOI , draft] <i>Dolores ranked 2nd in the international special issue competition Machine Learning for Soccer. Discussed in Prof. Fenton's Probability and Risk blog.</i> |
| J | [7] Constantinou, A., & Fenton, N. (2018). Things to know about Bayesian Networks. <i>Significance</i> , 15(2): 19-23. [Open Access DOI , PDF] |
| ITR | [8] Constantinou, A. (2018). Tennis player ratings based on points won and lost when serving and returning. <i>Deliverable Technical Report under Collaboration NO:22.20180524.</i> |
| J | [9] Yet, B., Neil, M., Fenton, N., Constantinou, A. , & Dementiev, E. (2018). An Improved Method for Solving Hybrid Influence Diagrams. <i>International Journal of Approximate Reasoning</i> , 95: 93-112. [draft , DOI] |
| J | [10] Yet, B., Constantinou, A. , Fenton, N., & Neil, M. (2018). Expected Value of Partial Perfect Information in Hybrid Models using Dynamic Discretization. <i>IEEE Access</i> , 6: 7802-7817. [draft , DOI] |
| ITR | [11] Constantinou, A. (2018). Temporal modelling and match prediction in Darts. <i>Deliverable Technical Report under Collaboration NO:21.20171114.</i> |

2017

| | |
|---|---|
| C | [12] Fenton, N., Constantinou, A. , & Neil, M. (2017). Combining judgments with messy data to build Bayesian Network models for improved intelligence analysis and decision support. <i>In Proceedings of the 26th conference on Subjective Probability, Utility and Decision Making (SPUDM 26)</i> , Haifa, Israel, August 20-24. [long abstract , slides] |
| J | [13] Constantinou, A. C. , & Fenton, N. (2017). The future of the London Buy-To-Let property market: Simulation with Temporal Bayesian Networks. <i>PLoS ONE</i> , 12(6): e0179297 [Open Access DOI , PDF] |
| J | [14] Constantinou, A. , & Fenton, N. (2017). Towards Smart-Data: Improving predictive accuracy in long-term football team performance. <i>Knowledge-Based Systems</i> , 124: 93-104. [DOI , draft] |

2016

| | |
|-----|--|
| C | [15] Constantinou, A. , & Fenton, N. (2016). Improving predictive accuracy using Smart-Data rather than Big-Data: A case study of soccer teams' evolving performance. <i>In Proceedings of the 13th UAI Bayesian Modeling Applications Workshop (BMAW 2016), 32nd Conference on Uncertainty in Artificial Intelligence (UAI 2016)</i> , New York City, USA, June 25-29, 2016, pp. 54-59. [extended abstract , slides] |
| J | [16] Constantinou, A. , Fenton, N., & Neil, M. (2016). Integrating expert knowledge with data in causal probabilistic networks: Preserving data-driven expectations when the expert variables remain unobserved. <i>Expert Systems with Applications</i> , 56: 197-208. [DOI , draft] |
| J | [17] Fenton, N., Neil, M., Lagnado, D., Marsh, W., Yet, B., & Constantinou, A. (2016). How to model mutually exclusive events based on independent causal pathways in Bayesian network models. <i>Knowledge-Based Systems</i> , 113, 39-50. [Open Access DOI , PDF] |
| ITR | [18] Constantinou, A. (2016). Generic Bayesian football predictions based on discrepancies in strength between adversaries. <i>Deliverable Technical Report for Venture Sports & Events Co. Ltd under Collaboration NO:20.SPORTS-BETTING.09/05/2016.</i> |
| J | [19] Constantinou, A. , Fenton, N., Marsh, W. & Radlinski, L. (2016). From complex questionnaire and interviewing data to intelligent Bayesian models for medical decision support. <i>Artificial Intelligence in Medicine</i> , 60: 75-93. [DOI , draft] |

Discussed in [Atlas of Science](#). Also discussed in Prof. Fenton's [Probability and Risk](#) blog.

- J** [20] Yet, B., **Constantinou, A.**, Fenton, N., Neil, M., Luedeling, E., & Shepherd, K. (2016). A Bayesian Network Framework for Project Cost, Benefit and Risk Analysis with an Agricultural Development Case Study. *Expert Systems with Applications*, 60: 141-155. [[DOI](#), [draft](#)].

Discussed in [CGIAR Water, Land and Ecosystems \(WLE\)](#).

- ITR** [21] **Constantinou, A.** (2016). Bayesian modelling and dynamic ratings for national football team assessment: The case of EURO 2016. *Deliverable Technical Report for Venture Sports & Events Co. Ltd under Collaboration NO:20.SPORTS-BETTING.09/05/2016*.

- J** [22] **Constantinou, A.**, Yet, B., Fenton, N., Neil, M., & Marsh, W. (2016). Value of Information analysis for Interventional and Counterfactual Bayesian networks in Forensic Medical Sciences. *Artificial Intelligence in Medicine*, 66: 41-52. [[DOI](#), [draft](#)].

Discussed in [Atlas of Science](#). Also discussed in Prof. Fenton's [Probability and Risk](#) blog.

- C** [23] **Constantinou, A.**, & Fenton, N. (2016). Smart data – not just big data: Real-world decision making with Bayesian networks. *SETforBRITAIN 2016*, Engineering and Mathematical Sciences Exhibition, House of Commons, Parliament, Westminster, London, UK, March 7, 2016. [[poster](#)]

- J** [24] Coid, J. W., Ullrich S., Kallis, C., Freestone, M., Gonzalez, R., Bui, L., et al. (2016). Improving risk management for violence in mental health services: a multimethods approach. *Programme Grants for Applied Research*, 2016;4(16). [[DOI](#), [PDF](#)].

- ITR** [25] **Constantinou, A.** (2016). Extending Bayesian Networks and Dynamic Rating Systems to the German, French and Spanish football leagues. *Deliverable Technical Report for Venture Sports & Events Co. Ltd under Collaboration NO:19.SPORTS-BETTING.26/02/2016*.

- ITR** [26] **Constantinou, A.** (2016). An expert's guide to providing subjective inputs for Bayesian Network football models. *Deliverable Technical Report for Venture Sports & Events Co. Ltd under Collaboration NO:19.SPORTS-BETTING.26/02/2016*.

- ATR** [27] **Constantinou, A.**, Fenton, N., Marsh, W., & Radlinski, L. (2016). From complex questionnaires and interviewing data to intelligent Bayesian Network models. *Atlas of Science*, 2016. [[Online](#), [PDF](#)].

- ITR** [28] **Constantinou, A.** (2016). Algorithmic rating for determining the current level of football team performance. *Deliverable Technical Report for Venture Sports & Events Co. Ltd under Collaboration NO:18.SPORTS-BETTING.17/11/2015*.

- ITR** [29] **Constantinou, A.** (2016). Bayesian network modelling for betting decision making of the Under/Over 2.5 Goals Scored outcomes. *Deliverable Technical Report for Venture Sports & Events Co. Ltd under Collaboration NO:18.SPORTS-BETTING.17/11/2015*.

2015

- ATR** [30] Fenton, N., Neil, M., & **Constantinou, A.** (2015). Simpson's Paradox and the implications for medical trials. Queen Mary University of London.

- J** [31] **Constantinou, A.**, Freestone, M., Marsh, W., & Coid, J. (2015). Causal inference for violence risk management and decision support in Forensic Psychiatry. *Decision Support Systems*, 80: 42-55. [[DOI](#), [draft](#)].

- J** [32] **Constantinou, A.**, Freestone, M. F., Marsh, W., Coid, J., & Fenton, N. (2015). Risk assessment and risk management of violent reoffending among prisoners. *Expert Systems with Applications*, 42(21): 7511-7529. [[DOI](#), [draft](#)].

Discussed in Prof. Fenton's [Probability and Risk](#) blog.

- C** [33] Yet, B., **Constantinou, A.**, Fenton, N., Neil, M., Luedeling, E., & Shepherd, K. (2015). Project Cost, Benefit and Risk Analysis using Bayesian Networks. In *Proceedings of the 12th UAI Bayesian Modeling Applications Workshop, 31st Conference on Uncertainty in Artificial Intelligence (UAI 2015)*, Amsterdam, Netherlands, July 12-16, 2015. [[Abstract](#)]

ITR [34] **Constantinou, A.** (2015). Managing the risk of model overfitting when parameterising complex Bayesian networks with football data. *Deliverable Technical Report for Venture Sports & Events Co. Ltd under Collaboration NO:18.SPORTS-BETTING.17/11/2015.*

ATR [35] Fenton, N., Neil, M., Lagnado, D., Marsh, W., Yet, B., & **Constantinou, A.** (2015). Modelling mutual exclusive events in Bayesian networks. Queen Mary, University of London.

ATR [36] **Constantinou, A.**, Yet, B., Fenton, N., Neil, M., & Marsh, W. (2015). What is the value of missing information when assessing decisions that involve actions for intervention? *Atlas of Science*, 2015. [[Online](#), [PDF](#)].

ITR [37] **Constantinou, A.** (2015). Bayesian network modelling for football match prediction of the Asian Handicap odds. *Deliverable Technical Report for Venture Sports & Events Co. Ltd under Collaboration NO:17.BETTING.21/7/2015.*

ITR [38] **Constantinou, A.**, Yet, B., Fenton, N., & Neil, M. (2015). Bayesian Modelling Framework for Planning and Evaluating Agricultural Development Projects. *Final Deliverable Report by Agena Ltd for ICRAF under Collaboration SD4/2012/214.*

2014

ATR [39] Coid, J. W., Ullrich, S., Kallis, C., Freestone, M., Gonzalez, R., Bui, L., Igoumenou, A., **Constantinou, A.**, Fenton, N., Marsh, W., Yang, M., DeStavola, B., Hu, J., Shaw, J., Doyle, M., Archer-Power, L., Davoren, M., Osumili, B., McCrone, P., Barrett, K., Hindle, D., Bebbington P. (2014). Improving Risk Management in Mental Health Services – A Multi-Methods Approach. The *National Institute for Health Research* (NIHR), UK 2014.

C [40] Marsh, W., **Constantinou, A.**, Yet, B., & Fenton, N. (2014). Evidence synthesis for patient-specific decision support using Bayesian networks. *Life Sciences Conference: Population Health in a Post-Genomic Era*, London, UK, December 2014.

J [41] **Constantinou, A.**, Fenton, N. E., & Pollock, L. J. H. (2014). Bayesian networks for unbiased assessment of referee bias in Association Football. *Psychology of Sport and Exercise*, Vol. 15, 5: 538-547. [[DOI](#), [draft](#)].
Discussed in [The Huffington Post](#) and in [Football Perspectives](#). Also discussed in Prof. Fenton's [Probability and Risk](#) blog.

C [42] **Constantinou, A.**, Freestone, M., & Coid, J. W. (2014). Development of a Bayesian network for violence risk management. *14th Annual Meeting of the International Association of Forensic Mental Health Services (IAFMHS)*, Toronto, Canada. June 2014.

C [43] Coid, J. W., **Constantinou, A.**, Freestone, M., Kallis, C., & Bui, L. (2014). Causal models for violence risk assessment and management: a new paradigm. *14th Annual Meeting of the International Association of Forensic Mental Health Services (IAFMHS)*, Toronto, Canada. June 2014.

C [44] **Constantinou, A.**, Freestone, M., & Coid, J. W. (2014). Using causal inference in risk analysis of violent re-offending among UK prisoners. *15th Annual Conference of the British and Irish Group for the Study of Personality Disorder (BIGSPD)*, Lincoln, UK. February 2014.

ATR [45] **Constantinou, A.**, Fenton, N. E., & Pollock, L. J. H. (2014). Bayesian networks for unbiased assessment of referee bias in football. *Football Perspectives*, 4 July, 2014 [[Online](#)].

2013

J [46] **Constantinou, A.**, & Fenton, N. E. (2013). Profiting from arbitrage and odds biases of the European gambling market. *The Journal of Gambling Business and Economics*, Vol. 7, 2: 41-70. [[PDF](#)]

ATR [47] **Constantinou, A.** (2013). Football: Win, Lose or Draw? *Computer Science For Fun* (CS4FN) [[Online](#)].

J [48] **Constantinou, A.**, Fenton, N. E., & Neil, M. (2013). Profiting from an Inefficient Association Football Gambling Market: Prediction, Risk and Uncertainty Using Bayesian Networks. *Knowledge-Based Systems*, 50: 60-86. [[Open Access DOI](#), [PDF](#)].

Dedicated website: [PI-Football](#).

J

- [49] **Constantinou, A.**, & Fenton, N. E. (2013). Determining the level of ability of football teams by dynamic ratings based on the relative discrepancies in scores between adversaries. *Journal of Quantitative Analysis in Sports*. Vol. 9, Iss. 1, 37–50. [[DOI](#), [draft](#)].

Dedicated website: [PI-Football](#). Also discussed in Jona's [Opisthokonta](#) blog.

2012 (before and during PhD)

T

- [50] **Constantinou, A.** (2012). Bayesian Networks for Prediction, Risk Assessment and Decision Making in an inefficient Association Football gambling market. Ph.D Thesis, Risk & Information Management Research Group, School of Electronic Engineering and Computer Science, Queen Mary, University of London. Primary Supervision: [Prof. Norman Fenton](#), Secondary Supervision: Prof. Martin Neil. September 2012. [[Original version](#)] [[Restructured version](#) (easier to read)]].

ITR

- [51] **Constantinou, A.** (2012). Professional business models based on football match odds. Technical Report for Agena Ltd, London, UK. August 2012.

J

- [52] **Constantinou, A.**, Fenton, N. E., & Neil, M. (2012). pi-football: A Bayesian network model for forecasting Association Football match outcomes. *Knowledge-Based Systems*, 36: 322-339. [[DOI](#), [draft](#)].

Discussed in [CS4FN](#). Dedicated website: [PI-Football](#).

J

- [53] **Constantinou, A.**, & Fenton, N. E. (2012). Solving the Problem of Inadequate Scoring Rules for Assessing Probabilistic Football Forecast Models. *Journal of Quantitative Analysis in Sports*. Vol. 8: Iss. 1, Article 1. [[DOI](#), [draft](#)].

Discussed in Jona's [Opisthokonta](#) blog

ATR

- [54] **Constantinou, A.**, & Fenton, N. E. (2010). Evidence of an (intended) inefficient Association Football gambling market. Queen Mary, University of London.

ATR

- [55] **Constantinou, A.**, & Fenton, N. E. (2010). Evaluating the predictive accuracy of Association Football forecasting systems. Queen Mary, University of London.

ATR

- [56] **Constantinou, A.** (2010). Football Match Predictions and Betting Strategies in Association Football Gambling Market. M.Phil to PhD Transfer Report. Risk Assessment and Decision Analysis Research Group, Electronic Engineering and Computer Science, Queen Mary, University of London.

T

- [57] **Constantinou, A.** (2009). Mathematical study of rational behaviour in Poker. MSc Thesis. Developed using C++. Department of Engineering and Information Sciences, University of Hertfordshire, UK, Supervised by [Prof Daniel Polani](#). Grade: A.

T

- [58] **Constantinou, A.** (2008). Alpha-Beta in Computational Chess. BSc Final Year Project. Developed using C#. Department of Engineering and Information Sciences, University of Hertfordshire, UK, Supervised by [Prof Daniel Polani](#). Grade: A.