

Dr Stephen Castell - Professional CV**Dr Stephen Castell FIMA MInstP MBCS MCMI CPhys MIOd CITP MEWI**

Chairman, CASTELL Consulting

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stephen@castellconsulting.com<http://www.e-expertwitness.co.uk>**Summary**

Dr Stephen Castell CITP, Medallist, *IT Consultant of the Year*, is an internationally acknowledged independent ICT expert, management consultant and project manager, with extensive experience in risk assessment, quality assurance, insurance and dispute resolution considerations, in complex and large-scale ICT systems, technology, investment, contracts, implementation projects and operations. As an Expert Witness in computer software and systems, telecommunications, broadcasting and technology disputes he has been involved in a wide range of systems & network development and installation, IP (e.g. patents, copyright, trade secrets), and data forensics litigation, including the largest and longest such actions in the English High Court. Widely published, a Correspondent of the *Computer Law and Security Report*, his seminal paper "*Forensic Systems Analysis: A Methodology for Assessment and Avoidance of IT Disasters and Disputes*" was issued as a *Cutter Consortium Executive Report*, Enterprise Risk Management & Governance Advisory Service series (Vol. 3, No. 2, March 8, 2006).

Dr Castell has also established a reputation in the building of multimillion pound businesses in voice and data communications, and in broadcasting, information, media and software services, having acted as a high-profile Business Development Consultant for and on behalf of both the BBC and BT. In the early 1980s he was a pioneer of the Over The Counter Market in the UK, responsible for assessing several hundred high-tech computer, software and telecommunications companies in a 5-year period, in preparing their flotation prospectuses, and serving as Non-Executive Director. In 1982, he was founder Technical Director of the Luxembourg venture capital funded *International Communications Technology Holdings SA*, listed in London, and Chairman of its UK subsidiary *Telephone Broadcasting Systems plc*.

He was recently honoured with an interview for *Archives of IT*: <https://archivesit.org.uk/> *Capturing the Past, Inspiring the Future. In-depth experiences of the people who influenced the development of IT in the UK.*



<https://www.bcs.org/membership-and-registrations/member-communities/law-specialist-group/committee/>

Descriptive Words and Phrases Used by Clients

- Analytical • Creative • Practical • Professional • Rigorous • Thorough
- Reliable • Dependable • Performing • High-Quality • Reputable • Successful
- Diligent • Resolute • Constant • Inspired • Unselfish • Enthusiastic • Decisive
- Independent Thinker • Authoritative • Scholarly • Thought-Leader • Capable.
- Track-record for multimillion financial business development achievements on behalf of clients.
- A Natural Leader and Manager. • Established Public Profile and Standing. • Discreet.
- Pioneer • Do-er • Achiever • Respected • Supportive • Effective Team-Builder.

Dr Stephen Peter CASTELL

Experienced Practitioner, Manager and Consultant in Information Systems, Computer and Communications Software, Technologies, Industries, Economics, Legislation and Regulation; Broadcasting, Media, Telecommunications, Internet, E-commerce, Blockchain, Cryptocurrency.

New Entrepreneurial Business Development Specialist. Expert Witness. CEDR-Trained Mediator, ICC Arbitrator, Expert Determiner. On the List of Experts of the Arbitration and Mediation Center of *WIPO*.

Personal

Married - Widowed (Wife: Anne Castell, Solicitor & CEDR Mediator: Senior Lecturer, Inns of Court School of Law, London, 2000-2006; Skills Training Professional, *Lovells*, November 2006). Deceased 02 March 2008: Obituary in the *Law Society Gazette*, 105/13; page 24, 3 April 2008. Four children: 46, 45, 42 and 34 years old.

Education**University of Nottingham**

PhD in Mathematics: "*Certain Transformations in Gas- and Magnetogas- Dynamics*".

Whole of PhD thesis published in mathematics and physics journals. Postgraduate Prizewinner. 1972.

MSc in Mathematics (Computer Science and Fluid Mechanics). 1969.

University of London

BSc First Class Honours in Mathematics, Physics and Psychology. 1968.

Schooling

Hamond's Grammar School, Swaffham, Norfolk. 1961-1964

11 'O' Levels, 2 'A' Levels. House Captain. Athletics *Victor Ludorum*.

Prince Rupert School, Wilhelmshaven, Germany. 1959-1961

Magnus Grammar School, Newark, Nottinghamshire. 1957-1959

Career

1978 to present: Chairman, Castell Computer and Systems Telecommunications Ltd ('*CASTELL Consulting*').

Own independent consultancy company, renowned for the strategising, planning, management and development of businesses in information and communications technologies, broadcasting and the media, and in analysing and influencing the financial, market, economic, regulatory and legal factors which affect them. Professional practice in IT and communications software/systems development, economics, management and strategy, particularly well known for the high quality and effectiveness of his work as an Expert Witness in major computer software and systems litigation, having developed powerful techniques of *Forensic Systems Analysis*. A special reputation for researching computer law and evidence issues. A track-record for business development and management in the fields of professional services, e-commerce/the internet, new media, databroadcasting, satellite, digital television, and image, voice, data and multimedia communications, particularly for entrepreneurial new companies and corporate venturing, and for high-profile clients, e.g. the BBC, BT, Pearson, Motorola, Met Office, Press Assn.

Previously:

- ☐ Manager, Group Management Services, Bremar Holdings Ltd, international bankers
- ☐ Consultant, Touche Ross & Co, Management Consultancy
- ☐ Senior Mathematician, Bearing Research Centre, RHP plc
- ☐ Applied Mathematician, Chalfont Park Research Laboratories, BACo plc.

Publications

Many papers and articles in national, international, professional, trade and technical press on IT, mathematical, technology, finance and investment subjects, particularly currently in blockchain and cryptocurrency. Bestseller book "*Computer Bluff*", 1983. "*The APPEAL Report*", 1990, a major study for H M Treasury on admissibility of computer evidence in court and the legal reliability/security of IT systems. Numerous letters published in e.g. *The Times* and *FT* on business, finance, technology, broadcasting, communications, science and law topics (in 1980, in one of many letters in the *FT*, coined the term ***Business Television***). Many appearances at International Conferences presenting on e.g. information services, software, databroadcasting, satellite business services, digital television, computer evidence, venture capital, enterprise management, litigation and ADR: for example, *SATELCOM '91*, Bucharest, Romania, the first pan-European satellite communications conference co-sponsored by the European Broadcasting Union (EBU), the European Space Agency (ESA) and Eutelsat; and the *First World Congress Multimedia*, Barcelona, October 1993, with a presentation "*Channel 5 - A national digital broadband communications highway*". Author and Presenter of his '*Avoiding IT Disasters – the Expert Way*' Course.

Other Qualifications

CITP, FIMA, MInstP, MBCS, MCMI, CPhys, MIOd, MEWI

Languages

Working knowledge of French and German

Awards: Medallist, *IT CONSULTANT OF THE YEAR*, British Computer Society IT Professional Awards.

Recreations: Patron, *London Cantamus Bach Choir and Orchestra*.

Example Links: <https://www.sciencedirect.com/science/article/abs/pii/S026736491830195X?via%3Dihub>
<http://www.computerweekly.com/Articles/2005/09/13/211761/Disasterbutnorecovery.htm>
<https://academic.oup.com/itnow/article-abstract/38/6/17/374876?redirectedFrom=fulltext>

Litigation, Dispute and Trial Experience

A substantial list of prior expert assignments is given separately in:

‘CASTELL - Revised - CV_Castell_Stephen_22Dec2020 30Dec2020.pdf’.

Illustrative Fintech, Blockchain and Cryptocurrency Experience and Involvement

1. Early 2000s: My consultancy defined, designed and built, first, a small-scale *Simulation Engine* for a particular London and Austria-based highly successful **commodity-trading entrepreneur client**. Based on contributing high-quality thinking, proprietary economic models and mathematical techniques, and using sound charting tools and quality data analytics, a novel, and subsequently highly successful, full-scale real-time commodities, OTC, derivatives and futures programmed-trading, mid-office, investor-handling and administration system was then created and delivered. When launched, it is understood that this system routinely achieved dealing gains for clients of, typically, 20% per month, with a unique, reliable, dynamic stop-loss downside-risk-limiting feature.

2. Providing Management and Business Development Advice to Worldfree Software Corporation, Ltd, concerning its yet-to-be-launched cryptocurrency the FreeMark. <https://worldfree.com/> Since May, 2019. The *FreeMark* is asserted to be unique as a digital currency in that there is a reliable basis for its valuation, explicitly and automatically pegged to a basket of commodities; the latter ties the *FreeMark*’s value to the physical world, protecting against devaluation; since there are 20 commodities in the basket, the various factors that affect each commodity tend to average out, leaving only a stable proxy for inflation; the *FreeMark* is engineered to be a better medium of exchange, as a stablecoin – it is not primarily an investment medium; and when the use of the *FreeMark* increases, owners receive a royalty.

3. Christine LaFond (nka Christine Shebeck) v Raphael LaFond October-December 2020. District Court Family division, Clark County, Nevada, USA. Case No.: D-16-544626-S.

Expert witness on behalf of the Defendant, instructed by Amanda M. Roberts, Esq., *Roberts Stoffel Family Law Group*, Las Vegas. Appointed at very short notice before trial, I provided a 43-page Expert’s Report, and gave (remote) oral testimony under cross-examination in court, in fulfilment of my instructions to:

- Review the Plaintiff’s Expert’s Report together with consideration of case documentation provided to me by my instructing attorney.
- Produce a high-level critique of the Plaintiff’s Expert’s Report, giving such insights, analyses, findings, conclusions and opinions as were to be sensibly achievable in the relatively limited timescale and associated effort and budget available for my work.
- Exclude my own technical investigation or research on or into the specific or detailed software forensics, cryptocurrency trading, wallet etc instances referred to within the Plaintiff’s Expert’s Report, given the extreme tightness of time for expert work effort.
- Provide an overview and explanation of the blockchain and cryptocurrency, crypto assets etc field to assist the understanding of the Court, in respect of principally a general introduction, plus as regards technical issues relevant in the case.

4. Pre-Action Dispute (Identities of Parties Confidential), London, UK March-April 2021.

Leading Real-Time Financial Markets Trading, Dealing and Administrative Systems Supplier – multi-million GBP dispute with major international Swiss-based investment banking group over alleged faults in ‘algo trading’ software system supply.

I was instructed by *Kennedys*, Solicitors, London, on behalf of the PI insurers of the Systems Supplier, to carry out limited investigations, analyses, and findings and provide a Preliminary Expert’s Report with a tight focus on the status of the systems development project as at 15/16 December 2020 ready for ‘go live’ on 18 December 2020. The relevant technical issues that fell within my field of expertise were the computer software and systems design, development, testing and delivery aspects of the project, particularly in regard to whether or not there were any *software material defects* therein, in and of themselves preventing ‘go live’ as at 18 December 2020. The dispute was settled prior to action shortly after provision of my 40-page Preliminary Expert’s Report.

5. Investor v Fund Manager in re Automated Decision Systems November 2021.

FINRA Arbitration, Three-Person Arbitral Tribunal, Massachusetts, USA – Confidential Hearing.

I gave sworn expert testimony (remotely) under examination and cross-examination at the Tribunal Hearing. The case was a dispute over use of Automated Decision Systems by a major US Fund Management Corporation to close-out the investment trading position of a client negligently, with heavy USD losses. The technical issue at the heart of the case was what ‘algorithms’/programmed trading/AI software the fund management corporation did, or did not, use; and, whether they did or not, did they anyway fail to use ‘reasonable professional skill, care and

diligence' in their (necessarily software-assisted) management/expert judgement, decision and execution of trade close-outs on behalf of a client to whom they arguably owed a fiduciary duty 'to hold harmless'. I provided technical opinion *inter alia* confirming that algorithms can in principle be designed to do anything, being limited only by the intelligence, imagination and experience of their conceivers, the skill of their software coders, and the capabilities of the available technologies and resources.

6. Upcoming Multi-Million USD Class Action against a NASDAQ-Quoted Cryptocurrency Online Trading and Services Company. Confidential Pre-Action Preparations. August-December 2021; & 2022.

Case concerning misrepresentations of software functionality and investment performance; it is understood that the Complaint, with potential damages claimed of some \$1bn, is likely to be filed in court imminently.

Appointed by the Florida, USA, attorneys for the Plaintiffs, I have been instructed in this case, likely to be a very high-profile and leading Class Action in the cryptocurrency industry, when launched, to

- Review the Complaint, in particular certain screenshots, together with consideration of initial case documentation provided to me.
- Working with, but independently of, a second expert witness for the Plaintiffs, a leading blockchain forensics consultant, monitor, record, write-up and analyse the concurrent test trades that he carries out using and operating the subject Company's software and certain other cryptocurrency trading platforms.
- Produce examinations by way of provisional analyses, findings, conclusions and opinions, giving such insights as may be sensibly achievable based on both the restricted documentation available prior to discovery and disclosure and relying on the data obtained from the concurrent test trades carried out.
- Provide a brief overview and explanation of the blockchain and cryptocurrency, crypto assets etc field to assist the understanding of the Court, in respect of principally a general introduction, plus as regards technical issues relevant in the case".

I have produced a 29-page Preliminary Expert's Report in support of seeking an Order for Discovery and disclosure of computer software and systems documentary evidence.

7. Currently: Providing ongoing due diligence and project management advice and implementation to a highly experienced cybersecurity and cryptography expert, the Founder of <https://www.unicorn.win/>

This is a soon-to-be-launched online auction platform for 'NFTs', Non-Fungible Tokens (see for example:

<https://en.99designs.fr/blog/web-digital/nft-art/#> <https://time.com/5947720/nft-art/>).

The Founder asserts Key Details of this innovative online auction concept as:

- The payment method on the platform for all bids in the auction is in cryptocurrency, opening the doors to cryptocurrency owners to acquire art/collectibles using their cryptocurrency.
- A unique royalties functionality that will allow the artist or the owner of items that list for the first time on the platform to receive 5% of the final bid *forever*, every time the item is sold.
- Use of blockchain technology and smart contracts to enable automation of receiving the auction bids in cryptocurrency.
- All items go through a rigorous process of selection where the owner has to provide authenticity and provenance of every item.
- With the NFT market currently positive and exciting, there are many new 'crypto' millionaires and billionaires who it is anticipated will want to acquire art and collectibles with their cryptocurrency, so it is expected that the auction process will be hugely successful.

Selection of Specific Publications

Fictional article, '*Ye Nom De Das Geld*', Stephen Castell. Published in the December 1971 issue of *GONG* (the student magazine of the University of Nottingham, UK), and introducing the conceit of a 'Post-Purse Paradise': "*Brothers and sisters, I welcome you to the post-purse paradise. ... Geld is in heaven, all's well with the world. ... Cromstock and I first mooted the possibility of an Economic Reformation taking place in Britain in The Journal Of Comparative Economics during ... 1969. ... to put into practice ... the tenets of the Quasicurrency Theory which I had been formulating over the preceding twenty-five years. ...*".

'BERTIE, the First Electronic Barrister. Computer Information Retrieval Accepted as Constituting "Publication"', Stephen Castell, John Scannell and Sheila Richardson. Law Society's Gazette, Wednesday 21 May 1980, p.521.

‘Hacking out computer legislation’, Stephen Castell, Update Newsletter (on computer audit, control and security), ‘Hacking Special’, Vol. 2, No. 1, 1989, pp. 10-13.

My 1980s *Verdict* and *Appeal* studies for HM Treasury, which were in part the basis for the enactment of the *admissibility* of computer evidence embodied in the *Police And Criminal Evidence Act* (‘PACE’) of 1984, were published, ‘sanitized’, and with the permission of HM Government, as *The APPEAL Report*, Dr Stephen Castell, 1990, May, Eclipse Publications, ISBN 1-870771-03-6.

Letter, ‘Computers out of control’, Dr Stephen Castell. *Financial Times* (London), Wednesday, May 29, 1991, SECTION I, Pg. 19, 218 words.

‘Evidence & Authorisation - is EDI legally reliable’, Dr Stephen Castell. *COMPAT 91* EDI Conference, 6 June 1991.

Letters, ‘Expert definition’, Castell & Turner. *Law Society Gazette*, 13 January 1993 (Re: *Times Law Report* 17-12-1992: *Regina v Shephard*).

‘Love led to fraud plot’, *Computing* magazine, 25-03-1993: *R v Elaine Borg* (CASTELL Expert).

Letter, ‘A judgment on computer hacking’, Dr Stephen Castell. *The Times*, March 25 1993.

‘Code of practice and management guidelines for trusted third party services’, S. Castell. INFOSEC Project Report S2101/02, 1993.

‘Computers trusted, and found wanting’, Castell, S. *Computer Law and Security Report*, 9, July-August, 1993, pp. 155-156

‘Commission of the European Community. Green paper on the security of information systems’, ver 4.2.1, 1994.

‘A computer of the simplest kind’, Dr Stephen Castell, *Computer Law and Security Report*, 10, May-June 1994. This provides further key references under ‘FOOTNOTES’.

Letter, ‘Reliability not admissibility’, Stephen Castell. *Computing* magazine, July 27, 1995.

<https://academic.oup.com/itnow/article-abstract/38/6/17/374876>

‘Seeking after the truth in computer evidence: any proof of ATM fraud?’, Stephen Castell. *The Computer Bulletin*, Volume 38, Issue 6, December 1996, Pages 17–19.

Letter, ‘What the ECU stands for’, Stephen Castell. *Computing* magazine, 20 July 1995: “As cybertrading grows, the new, powerful, common electronic trading currency will be ‘owned’ by no single physical nation state, central bank institution, economic or political grouping. ... the ECU ... the Electronic Cash Unit”. [Preceding by thirteen years the Satoshi Nakamoto paper ‘Bitcoin: A Peer-to-Peer Electronic Cash System’ of 31 October 2008].

<https://www.sciencedirect.com/science/article/abs/pii/S0267364900870648>

‘Year 2000 problem: Y2K PRE-ACTION PROTOCOL — STEPS TOWARD DISPUTE RESOLUTION’, Graham Ross (Solicitor), Stephen Castell, Dr. (Report Correspondent, Chairman CASTELL Consulting). *Computer Law & Security Review*, Volume 16, Issue 1, 1 February 2000, Pages 20-22.

‘Thought for the day: Learn from the tax credits debacle’, Stephen Castell. *Computer Weekly*, Tuesday 16 December 2003: “It seems the Inland Revenue cannot get forensic-level IT expert examination of projects from the National Audit Office or the Office of Government Commerce. Stephen Castell, an expert witness in computer litigation, offers a way forward.”

<https://www.cutter.com/article/forensic-systems-analysis-methodology-assessment-and-avoidance-it-disasters-and-disputes>

‘Forensic Systems Analysis: A Methodology for Assessment and Avoidance of IT Disasters and Disputes’, Stephen Castell. *Cutter Consortium*, Executive Report, February 1, 2006, in *Business Technology & Digital Transformation Strategies*.

Expert Contributor to the 2016 *Draft Convention on Electronic Evidence*, the first ever treaty dealing with the status, examination, recognition, and admissibility of electronic evidence. The *Draft Convention* was initiated and developed by Stephen Mason, Barrister and Author, and published as a supplement to the Volume 13: 2016 issue of the *Digital Evidence and Electronic Signature Law Review*
<http://journals.sas.ac.uk/deeslr/issue/view/336/showToc>.

<https://realmedia.press/looks-like-signature-i-never-signed-berrys-rbs/>

‘IT LOOKS LIKE MY SIGNATURE, BUT I NEVER SIGNED IT’ – THE BERRYS & RBS; By Kam Sandhu, February 16, 2017. ... ‘I wanted the best’, says Mark Berry, ‘We’d never had this document. The loan was based on the limited customer account. We searched the Internet and found an expert called Dr Steve Castell who had been involved in fraud cases in Australia.’ ...

<https://www.bcs.org/articles-opinion-and-research/avoiding-disaster>

‘Avoiding disaster’, ITNOW, 25 Sep 2017. DevOps brings new challenges to the professional IT project manager, particularly in avoiding a DevOps disaster project (DisPro). Dr Stephen Castell, Chairman, CASTELL Consulting, explains how to recognise the signature of an IT disaster project.

Featured appearance on: <https://vimeo.com/user36208838/review/521337180/4828eb4ac2> – Crypto-Blockchain TV, Episode 01, February 2018.

‘Blockchain vs. Trust: Cryptic Expert Issues’, by Dr Stephen Castell CITP MIOd MEWI. A 12-page presentation for *The Reg A Conference*, New York City, June 12, 2018.

<https://www.sciencedirect.com/science/article/abs/pii/S026736491830195X?via%3Dihub>

‘The future decisions of RoboJudge HHJ Arthur Ian Blockchain: Dread, delight or derision?’, Stephen Castell. *Computer Law & Security Review*, Volume 34, Issue 4, August 2018, Pages 739-753.

<https://www.solicitorsjournal.com/sjarticle/Authoried%20by%20AI>

‘AUTHORED BY AI Here be crypto dragons: it’s all about the evidence, proclaims the *CastellGhostWriteBot*’, Dr Stephen Castell. *Solicitors Journal*, October 2019, pp 43-45.

Can you tell if this has been authored by a robot? Would it matter, legally or otherwise, if you couldn’t? Are you crypto-friendly, or if not, at least crypto-aware? ...

<https://www.scirp.org/journal/paperinformation.aspx?paperid=105930>

‘The Fundamental Articles of I.AM Cyborg Law’, Stephen Castell. *Beijing Law Review*, December 18, 2020, Vol. 11, No. 4, 911-946.

<https://www.mixcloud.com/BlockchainRadio/digibytesguest210226/>

Recording of the interview with Stephen Castell about his *QE2-Coin* proposal to the UK Government, by Jonny Fry, Friday, 26th February, 2021, on the Digital Bytes Show on *Blockchain Radio*.

‘Slaying the Crypto Dragons: Towards a CryptoSure Trust Model for Crypto-economics / Blockchain vs. Trust: The Expert’s View of the Crypto Scammers’, Dr Stephen Castell, CASTELL Consulting; Chapter in the Springer-SIST book “Blockchain Technology and Innovation in Business Process”, published March 2021:

https://www.researchgate.net/publication/350361916_Slaying_the_Crypto_Dragons_Towards_a_CryptoSure_Trust_Model_for_Crypto-economics_Blockchain_Versus_Trust_The_Expert's_View_of_the_Crypto_Scammers
Blockchain Technology and Innovations in Business Processes, 03/2021: pages 49-65; , ISBN: 978-981-33-6469-1, DOI:10.1007/978-981-33-6470-7_4

The eBook ISBN – 978-981-33-6470-7 (<https://link.springer.com/book/10.1007/978-981-33-6470-7>)

The Chapter DOI – 10.1007/978-981-33-6470-7_4 (https://link.springer.com/chapter/10.1007/978-981-33-6470-7_4).

“I, Bitcoin”: As told to Stephen Castell, *The World Financial Review*, June 16, 2021, by Stephen Castell
<https://worldfinancialreview.com/i-bitcoin-as-told-to-stephen-castell/>

Inspired by, and paying homage to, the quintessential 1958 essay on free-market economics, “I, Pencil”, by Leonard Read (<https://fee.org/resources/i-pencil/>), Dr. Stephen Castell adapts and refashions its lyrical narrative to illuminate bitcoin’s multidimensionality: the cryptocoin’s digital complexity, existential vacuity, absence of the Invisible Hand, and potentially damaging environmental impact.

<https://www.expertwitness.co.uk/articles/journal/in-a-new-survey-a-majority-of-attorneys-and-expert-witnesses-call-for-increased-cryptocurrency-regulation>

'In a new Survey, a Majority of Attorneys & Expert Witnesses Call for Increased Cryptocurrency Regulation', Dr Stephen Castell CITP. *ExpertWitness*, August 5, 2021.

https://www.youtube.com/watch?v=EBAvemzo1zo&list=PLKBhokJ0qd3_wlvr0j85YhmNfNj8ZJ8M-&index=3
SPA-359 Software Defects and the Law (Dr Stephen Castell, 6 Oct 2021)

<https://www.actascientific.com/ASCS/ASCS-03-0194.php>

'Direct Government by Algorithm Towards Establishing and Maintaining Trust when Artificial Intelligence Makes the Law: a New Algorithmic Trust Compact with the People', Stephen Castell. *Acta Scientific Computer Sciences*, November 2021, 3.12, 2021: 04-21.