Michael W Clarke

Author, technologist, ICT specialist

Dongming Lu 511, Pu Dong, Shanghai, China

+86 156 1858 7365 | mick.clarke@outlook.com | www.avastmick.io | avastmick | mickclarke138 | avastmick

There is always another way - always.

Education

University of York (UK)

M.Sc. Information Processing, 1998 - 99

— *Thesis: Virtual Camera Positioning in Graphical Worlds.* The problem domain was to create an artificial intelligence (AI) algorithm using real-time 3D geometric / NLR analysis that would allow an optimal virtual camera position to be realized when viewing targets in a dynamic graphical world. The calculations would have overriding rule sets preventing non-natural viewing positions, yet avoiding target occlusion.

University of York (UK)

B.A. (Hons.) Literature, 1995 - 98

— *Dissertation: Moby Dick*.

Work Experience

Self-employed (Shanghai, China)

Author and writer, August 2016 - present

— Designed, coded and deployed new personal website www.avastmick.io.
— Wrote debut novel, Consensus.
— Created author's toolchain for an easier writing and publishing experience.

New Zealand Defence Force (Wellington, New Zealand)

Architect and technical lead, November 2014 - June 2016

— Architect and technology lead for Secret Enhancement Programme and Information Environment.
— This programme completely overhauled the NZDF's military operational ICT capability and provided the technology foundations to ensure that fully participate in the information-driven warfare of today and do so in a highly secure manner. The solution I designed was bleeding-edge and innovatory; it completely transformed the way that ICT was delivered within the organisation.
— A fully automated outcome to meet flexible military operational needs of the New Zealand Defence Force.
— The solution includes a datacenter backend and hosting for a variety of applications, through to a user desktop.
— Security of the solution was, of course, vital, and compliance to both local and international security standards was required.

— The solution was delivered using Ancible, Vagrant, Packer onto a VMWare virtualized environment. The code base was secured and managed using GitHub Enterprise.

Datacom Systems (Wellington) Ltd

Technical Lead and Solution Architect, February 2008 - June 2016

— Reporting at a senior GM level within the software division (S&I) of Datacom Systems Wellington I have had a wide ranging role.
— Technical leadership on projects including design of technical solution, implementation, training and mentoring.
— Technical pre-sales, I would provide the technical inputs into the sales initiatives, in particular RFP / RFT responses where Datacom would seek to provide software services.
— On-site consultancy, either as a technical expert particularly in the web technologies and enterprise integration domains, or a wider architectural adviser who providing inputs into organisations technical delivery and quality processes.
— Within the Datacom software division, S&I, there I was part of a technical architecture team of four, each working on different accounts. Measurement is either through sales, either through bid-work or on-site opportunities, or a blend of utilisation and chargeable rate value.
— During my time at Datacom I have always fully met and largely greatly surpassed the targets given to me.

Bank of New Zealand

Technology Lead, June 2013 - November 2013

— Technology Lead for the NextGen Programme - Information Transformation Business case.

RealMe at Kiwibank

Technology Lead, January 2012 - June 2013

— *RealMe* is New Zealand's Digital Identity and Personal Information sharing platform. It allows individuals to digitally share information about themselves in real-time directly from authoritative data sources.
— This means that the information individuals provide can be treated with a high degree of trust, mitigating the need for further back-office and manual verification steps. In simple terms RealMe will provide a means for organisations to automate and streamline their relationships with individuals while increasing trust and lowering risk.
— Individuals will for the first time have control over the verification of their personal information, seeing where, why and when they provided any personal information to organisations. They would know that through RealMe they would reducing the need for covert collation of information about them without their consent.
— RealMe builds upon DIA's core igovt infrastructure to deliver a potentially market changing proposition: a viable means for individuals to share their personal information across the NZ economy. The solution created was an identity attribute broker that allowed seamless interchange of data from disparate sources. At the time it was highly innovative and approached the problem from a different angle to the approaches taken previously.
— I led the solution development team across all parties and put in place the required technology, delivery processes and governance to deliver to market RealMe.
— The solution has to have met the very highest requirements of information security and privacy protection, as well as fulfilling the policies of the underpinning legislation.
— I also led the product development team to develop the product roadmap for RealMe and help shape what the product will become over the next couple of years and beyond, including how RealMe will become a viable information sharing platform.
— The technology for the solution is based on Open Source technologies used in a novel context.
— realme.govt.nz

Datacom Systems (Wellington) Ltd

IBM Practice Manager, May 2011 - December 2011

— This role was a short-term formal initiative internal to Datacom that leveraged my knowledge and understanding of the IBM technical solution stack, where I developed the roadmap and processes for Datacom to become an IBM Premier Business Partner within 3 months.
— I consolidated the skills base and initiated and led a training and certification programme to support the Datacom IBM software practice.
— I worked closely with IBM to ensure alignment on Datacom joint ventures at customers such as NZ Customs, ACC, Wellington City Council and Telecom.

Techspace Consulting Limited

Consulting Architect, November 2010 - May 2011

— Enterprise Architect for the MSD/IR/DIA (NZ) ServiceLink project business case development.
— As part of the business case development team I built a set of architecture models that would support the short term goals of ServiceLink as well as the wider strategic goals of both government service transformation and ICT direction. The development of architecture models included the necessary requirement analysis, formalisation of architectural principles, a logical structural model and projected cost model that feed into the typical needs of complex architectures.
— The architectural foundations laid here went on to inform a number of cross-NZ Government transformation or joint-agency initiatives.

ANZ Bank

Technical Consultant, May 2008 - November 2010

— I provided technical consultancy to ANZ across a number of key projects.
— **International Payment Services (IPS)**: as lead payments architect I designed an innovative business service-based architecture using WebSphere Process Server (WPS) with a Spring framework front-end. The solution was tailored for delivering international and high value payments to multiple channels.
— There was a heavy emphasis on stakeholder management and communication to convey the benefits of the solution.
— The implementation of IPS has been a success and seen a viable means of providing business function to multiple channels across the organisation.
— *Common Systems*: I led the architecture stream for the initial business case development to evaluate the means of core banking system consolidation for the then two banks (ANZ and National Bank) onto the same core banking product, Systematics. This work helped lay the architecture, technology and business analysis foundations for the later implementation under the NZS programme (2011-2012).
— *Oscar*: A retrospective architectural and technical review of an internally developed CRM tool in order to manage quality improvements through alignment to the new "Solutions Pack" I had developed I evaluated the current technical implementation including delivery process review and general code quality practices. I tabled recommendations for improvement and roadmap.
— *ADLO* was at the time ANZ's sole business banking online platform. As architect, I introduced to ANZ a new Solution Architecture process and methodology, including a new artefacts "pack" that would cover all the required documentation for solution development, including a lightweight means of governance gate management. This was to raise the internal quality processes and introduce a more agile and robust software delivery.

ANZ Bonus Bonds

Technical Lead and Solution Architecture, March 2009 - May 2010

— I designed the architecture and led the 12 person technical team for the re-platforming of the 20 year old CICS/COBOL Bonus Bonds registry system. and delivering a new channel infrastructure, including a new online channel "*My Bonus Bonds*", a new front office teller channel and back office administration system.
— A strong focus, as always, was on the security of the system and the integrity of the data migration effort.

— This solution offered ANZ provided a systems upgrade that led to significant cost savings and reduction in operational cost as well as a modern web experience for the expansion of the Bonus Bonds product online for the first time.
— A number of solution constraints were in place, within these the technology was a JEE application using the Seam framework with a SQL Server 2008 database deployed to a Sun Glassfish application server on Windows Server 2008.
— I determined the technical stack as well as designing and configuring the delivery suite the used Hudson, Subversion, Jira and Sparxx EA tools.
— I was hands on and built the identity management, authentication and authorization modules as well as conducted code reviews and ensured quality measures were adhered to.

Salmon Ltd

Technical Consultant, January 2006 - January 2008

— Gold Group International:
— I was the technical lead and sole developer for the delivery of 4 new eCommerce sites based on the Ann Summers and Knickerbox brands using the WebSphere Commerce 6.0 framework. Delivery December 2007 to February 2008.
— Argos Financial services:
— Architecture and design of a new online financial product channel, including online credit card application workflow and interface to Experian credit profiling; loan application workflow; and full integration into the Argos Retail eCommerce site to allow credit-based sales within a typical sales cycle. Delivery March 2006 to January 2007.
— Argos Retail:
— Argos is the third largest eCommerce site in Europe behind Amazon and eBay (2007). Led the migration of the existing eCommerce platform from WebSphere Commerce 5.4 to 5.6. for the , and eCommerce sites.
— Arcadia plc:
— Implemented a new multi-store eCommerce platform using the WebSphere Commerce 5.6 framework.
— (Dorothy Perkins, Burtons, Top Shop etc)

Ondemand (Vubiquity)

Technical Lead, January 2004 - December 2005

— Formed and led the team that would produce deliver content for the first true Video On Demand (VOD) service in Europe. Included deciding the technology stack and development approach.
— I was brought in initially as the software architect and later acted as the head of development. After initial evaluation I determined that given the truly novel nature of the job in hand no third party could deliver a solution that would not require wholesale customization or remodelling of their offering.
— This potential of providing complete IPR ownership to OnDemand persuaded the company owners that the best course was in-house development based entirely on Open Source software. All knowledge was retained in-house with no on-going license cost, and a profitable sideline allowed the company to re-sell the solution to other VOD content providers across Europe.
— The software is now used across Europe and the US and is a market leader for asset management and lifecycle management for VOD.

Yoomedia

Development Manager / Technical Lead, October 2002 - December 2003

— Managed the product delivery team, including software development, graphic design and testing. Delivered into market a number of novel interactive cross-channel products including games, web applications, social sites and chat-based services to web, TV and early mobile channels.
— Overhauled the company's software delivery infrastructure. I rationalized the disparate technologies (Java, PHP, ASP, Visual Basic, DCOM) into a single Java/J2EE based solution stack. This:
— Lowered cost;

- Enabled simpler recruitment;
- Improved resource management;
- Reduced project time to market.
- I designed the back-end components relying on free-ware/open source libraries. Implementing a cross-channel MVC design pattern as content delivery system for dynamic content in a Digital TV client. We were early adopters of agile methodologies we used iterative processes to deliver products in an immature market.
- The platform produced was pretty novel at that time and was a precursor to the now commonplace multichannel platforms. Whereas now these would be providing content to mobile and web channels via micro services, we did this to esoteric platforms such as Liberate (JavaScript), OpenTV (C) or web (HTML and JavaScript).

Virtual Sciences BIS (Netherlands)

Technical Lead, December 2001 - October 2002

- Clients:
- *Profinesse* (Netherlands) - Technical Lead. .NET (1.1) C# Windows2000 application. Implemented a desktop management system for insurance brokers and telemarketing control interface.
- *De Autolijn Lease Insurance Management* - Technical Lead. Overhauling existing J2EE web application. Re-built the EJB structure in order to tune for performance. Applied the 'Session Façade' and ValueObject Design Patterns to class hierarchy to reduce dependence on Entity beans. Implemented a full set of application communication functions – including logging (log4j), mailing, SMS, archiving. Added new functionality for integration with client back-office systems (XML) with a standalone .Net client for those clients with only dial-up access to main system.

Liberate Technologies (EMEA)

Integration Lead Developer, September 2000 - December 2001

- Interactive TV service integration
- On-site technical consultancy

Flextech Interactive

Software Developer, May 1999 - September 2000

- Various software development for interactive TV

References

Professional references can be provided on request.