# Curriculum Vitae – Dominic Morris

[dom@lamoto.co.uk](mailto:dominic.morris@lamoto.co.uk)

+65 9007 0104

## Core Values and Principles

A passionate believer that human capital comprises the greatest asset of all organizations, I aspire at all times to work by – and to instill in others – my core values and principles;

* The pursuit of excellence; continuous improvement
* Leadership by example; integrity and respect
* Transparency and delivery

## Skill Set

**Management and Leadership**

I have a proven track-record in the ownership and execution of high-value technical programmes. I have experience and accomplished results in defining business and technical strategies, building and managing high-performance technical teams, equity sale negotiations and the creation of senior stakeholder engagement and staff empowerment.

**Capital Markets**

In-depth experience in a wide variety of challenging scenarios, including: live pricing and exchange connectivity; static data and corporate action automation; front-office analysis & development; currency options, equity-derivatives, commodities & energy derivatives, real time risk, position and market data management, trade processing and order flow, intraday messaging and EOD parallel batch processing.

### Core Technical

C: 21 years’ experience, C++: 17 years.

C# (Beta 1, 2, RC1, RTM, 1.0, 1.1, 2.0, 3.0, 3.5, 4.0, 5.0): 12 years.

.NET CLR: 11 years.

Visual Basic & ASP.NET (VBA, 4 - 6, & .NET Beta 1, 2, RC1, RTM, 1.0, 1.1, 2.0, 3.0, 3.5): 12+ years.

Microsoft TSQL: 13 years, Oracle PL/SQL: 12 years.

XML, DOM, SAX, Java JDK, JavaScript, ASP, VBScript, DHMTML: 11 years.

### Languages

Bilingual English/French, basic Indonesian/Malay

## Education

### GCSE and A Level

GCSE: 7 As, 3 Bs / A Level: A, B, C

### Conditional offer from King's College, Cambridge

To read Natural Sciences or Philosophy - declined.

### Recent Study / Interests

Hobbies: Chess, Judo, history of ideas.

## Commercial Experience

**TradeHero** ~ Co-Founder and Chief Technology Officer

**August 2012** – *current*

[www.tradehero.mobi](http://www.tradehero.mobi)

[www.nrf.gov.sg](http://www.nrf.gov.sg) / [www.tnfventures.com](http://www.tnfventures.com)

[www.kpcb.com](http://www.kpcb.com) / [www.ipvcap.com](http://www.ipvcap.com)

TradeHero is gamified and mobile-optimized virtual investment community. Powered by proprietary and patented technology, it allows users to trade across 24 global exchanges in 36 currencies, to find and follow top-rated traders and to learn the mechanics and specifics of investing in the global markets.

In July of 2013, TradeHero closed a USD $10m Series B investment with Kleiner Perkins Caufield Byers – their first ever in a Singapore-based technology firm – and IPV Capital of China. The deal represents a ten-fold increase in shareholder value in the first year of the company’s operation.

At time of writing – since its launch in January of 2013 – TradeHero attained the #1 App Store spot for Finance in some 66 countries and has been ranked top 10 in 92 countries. We were voted a top 10 ASEAN tech startup by Inside Investor and a top 20 startup by the Singapore Business Review.

TradeHero moved from the concept to realization stage in August of 2012 after it successfully completed a Series-A financing round from the Singapore National Research Foundation (NRF) and TNF Ventures. This allowed us to execute the first phase of product development in which we converted a proof of concept into a scalable minimum viable product, comprising iOS, SQL Server and C# WebApi infrastructure. This culminated in a public launch in January of 2013.

User acquisition rates and engagement traction since launch exceeded our initial expectations by a full order of magnitude. This allowed us to go back to market almost immediately for further growth capital. I represented the firm’s interests when negotiating with a number of VCs in Silicon Valley while my co-founder covered strong interest from China-based investors.

The technology team – some 15 staff representing 80% of the company – has been under my direction since inception and includes and number of financial markets industry veterans alongside senior and junior members. Key technical challenges included the provision of exchange connectivity for live prices to support trading competitions sponsored by a leading APAC warrants issuer, multi-portfolio aggregation and analysis, design and implementation of corporate action handlers, static and EOD data feeds across disparate global exchanges as well as a multitude of scalability, growth and operational challenges inherent in an early stage and fast growing company.

**Standard Chartered** **Bank** ~ Global Release & Quality Head, eCommerce

**January 2012** – **August 2012**

During my time at SCB I ran the eCommerce Quality Assurance and Release Management teams within the Financial Markets Solutions Delivery eCommerce team. I was responsible for the design and implementation of best practices across the release and quality disciplines, as well as for the aggressive hiring and built-out of the groups operational capabilities.

Executing this role within eCommerce was challenging and stretching; extremely demanding business requirements drove a very rapid pace of development on a relatively new and external client-facing platform. My teams’ outputs were directly responsible for the accurate and effective management of reputational and market risk as the platform’s business capabilities were iterated over very rapid timescales.

I left this role at SCB to take up a unique opportunity in an early-stage technology startup.

### Citi ~ Global Release Manager & Head of Engineering, Equities Risk Technology

**October 2008 – December 2011**

My role within the equities technology group was to oversee and lead the development, testing and deployment policies and practices for the firm’s global front-office equities risk platforms. Key accountabilities included synchronized and multiple region rollouts to all the major global trading regions, continual review, leadership and innovation in strategy and execution, and sustained programme delivery across disparate and diverse functional areas.

My initial focus was on coordinating and streamlining development lifecycle and deployment processes of the real time risk services, trade capture and order processing of the equity derivatives & hybrids/exotics businesses. As part of this, significant and measurable increases in quality and decreases in cost were attained across the global development group.

My primary responsibility was for the coordinated output and rollout of business-facing functionality from the global development group, encompassing North America, EMEA and Asia-Pacific regions and totaling in excess of 250 development staff. The group’s applications and code base were mature (18+ years), expansive (C++, C#, .NET 1.1, 2, 3 and 3.5) and business critical (deployed globally on the firm’s front-office equities desks). The role required low-level technical understanding of a wide variety of platforms, detailed and specific industry knowledge of the equities business and a pragmatic and delivery-oriented business aptitude. Daily interactions were across the breadth of the business, from developers and quantitative analysts to heads of desks and global group managing directors. Liaising directly with development managers from all three regions, I reported on a daily basis to the managing director of the global equities technology function. I led a convergence of purpose and mission across the stakeholders and contributors from key areas: quantitative analysis, production support, infrastructure, development, test and senior management. Standout technical and strategic deliveries included 64-bit migration planning and execution for the entire solution portfolio and virtualization of the global engineering, QA and UAT hardware estates.

I evangelized and executed the integration of core business applications into a standardized global release and implementation cycle: business deliveries were transformed from an unreliable quarterly or ad-hoc basis, to a timetabled monthly cycle, delivering at or beyond a measurable and specific quality metric. I was responsible for developing standardized control and regression testing of the application suite, and I introduced and drove the implementation of unified issue and defect tracking, build and source-control systems across seven countries and fragmented delivery teams. During my time with the firm, I led and built out the global test and release teams to encompass a number of key functions: development, QA and UAT environment management through virtualization and automation, global release programme management and automated regression testing.

Most recently I have relocated to Singapore to lead the region’s increasing contribution to the global equities business and to bolster the firm’s broader efforts around change and innovation. As part of this I have actively positioned the equities technology group to act as key customer in the firm’s board-sponsored Efficiency Process Group: working directly with the CIO for capital markets has given me direct engagement and input into the firm’s cultural transformation program across disparate areas: I have personally sponsored and driven improvement items in the firm’s communications, resourcing and infrastructure strategies; through dialog with senior management I have positioned equities technology to be a front-line beneficiary of these process and reengineering efforts. Implementation of these and other initiatives across markets technology stands to positively impact some 3,500 staff. Of particular personal pride was presenting to this population at the CIO’s request and alongside the global head of the equities technology function. Key stakeholders in this process have spanned the range of the organization; from the technology senior management team through to development, support, compliance and operations key personnel.

### Microsoft Consulting Services (MCS) ~ Release & Implementation Manager

**September 2005 – September 2008**

<http://btvision.bt.com/>

British Telecom selected Microsoft TV IPTV Edition as their software platform for TV over broadband in June 2005. The Microsoft Consulting Services (MCS) delivery team, which I was part of throughout the three year engagement and in which I performed the integration team release management role, successfully developed, delivered, maintained and transitioned the solution to the customer over the course of the program. This represented the single most strategically important project within MCS, being the first commercial European rollout of Microsoft’s IPTV Edition platform and accounting for a significant proportion of MCS target revenue over the period.

The IPTV Edition platform comprises a broad service-orientated architecture Microsoft technology base: secure web services communicating on commodity hardware running the full range of Windows platforms: .NET 1.1, 2.0, 3.0, 2003 Server, CE 5.0, IIS 6.0, SQL Server 2000 and 2005 and Terminal Servers. The project encompassed the integration of IPTV Edition with seven BT operational systems: Service Scheduling, Siebel CRM, Credit Management, MIS, Fault & Repair and Telecoms & Network Management.

My role within the delivery team was to ensure the technical quality of the solution and release and customer management. Within MCS I worked with and reported directly to senior stakeholders, primarily the Program Manager and I was also responsible for a considerable degree of customer management, working directly with BT’s Release Management team to coordinate major releases and transitions. This included on-site customer management and technical leadership during key phase transitions in the program.

This was also a hands-on technical role, in which I had responsibility for a team of 8 Software Design Engineers and their development and test methodology. Key deliverables included automated dynamic test-case generation via test-domain modelling, proprietary test framework development and security and penetration analysis & testing in adherence with Microsoft's 3D security practices. The team produced ~5,500 static build verification, functional, boundary, integration and end-to-end test cases for execution under NUnit, Visual Studio Team Suite (MSTest) and internal test framework tools. The primary development platform was .NET 1.1, 2.0, 3.0 and 3.5; the development methodology was Agile/Scrum with customer deliveries and quality-gates met every five weeks.

The full UK deployment of IPTV for BT consists of several hundred production servers; major milestones included the successful in-place migration of the live platform from IPTV 1.1 to IPTV 1.1 SP2, quick fix engineering to support peak subscriber growth rates of several tens of thousands of consumers per week and knowledge transition to BT’s chosen partners for ongoing development and maintenance.

### RBS Financial Markets ~ Software Architect & Developer, Currency Options

**February 2005 – September 2005**

I joined Royal Bank of Scotland’s development team to assist in the production of a complete replacement for the bank’s current currency options trading platform. Their currency options business was formed after the merge of the vanilla and exotic desks: SystemX was designed as a strategic technical platform to better support the consolidated business by providing integrated risk management and more rapid market-event reaction capability. The overall project aim was to support a doubling the business’ volumes and revenues through a more scaleable and modern trading platform.

Some key business benefits that were realized included:

* A new cash model, providing a consistent way of representing entities such as brokerage, premiums, and cash deals.
* A unified storage and eventing model for trades, preserving groupings, strategies and hedges.
* Ad-hoc intra-day reporting and faster end-of-day batch processing through computation parallelism.

The system design was based around a distributed service-orientated architecture: a key design goal was the production of loosely coupled and well encapsulated components. This was successfully achieved through rigorous use of MVC design patterns and test-driven development. Heavy use was made of remoting, reflection and dynamic type-loading in order to produce stateless and scalable components. Implementation was through .NET 1.1, C# and Oracle 10g.

I had specific responsibility for the design and execution of a new batch processing framework which replaced the existing serial end-of-day batch. The new processing environment delivered a fault-tolerant, exotics-scalable and distributed model for the parallel execution of heterogeneous job-types. This further served to provide ad-hoc intra-day reporting functionality to downstream consumers. Although primarily driven by Middle Office requirements, other areas of the business which directly benefited from this new intra-day reporting functionality included Finance, Risk and Settlement.

In addition I was heavily involved with the design and production of a replacement for the bank’s intra-day real-time messaging middleware. Front and Middle Office events required notifications to be published via the bank’s standardized messaging platform (Argon) in order to facilitate full deal management of both vanilla and exotic FX and interest-rate products.

Due to the scale and scope of the project, the team sizes were necessarily large: some thirty developers in multiple streams managed by around half a dozen stream leads. A key factor in the successful delivery was heavy use of agile programming practices: continuous integration via NAnt and Cruise Control, automated testing via NUnit, NCover and NMock, and standards enforcement via NDoc and FXCop and peer review.

### Deutsche Bank ~ Software Architect & Developer, Exotic Equity Derivatives

**October 2004 – February 2005**

Deutsche Bank required the rapid development of a real-time risk management platform for use in the front-office by their global equity-derivative exotics traders.

The system was designed in order to improve upon a large number of highly-customized and complicated Excel spreadsheets, and to replace them with a single high-performance client-side risk aggregation engine coupled to a **WinForms** front-end providing rich graphical visualization tools and high-performance views on large datasets. The technology used was **.NET**, inter-operating with pre-existing **Java**, **TIBCO JMS**, **SOAP** and **WebLogic JMS** systems.

The system’s main data feeds were the static deal data, pricing and risk data from a distributed exotics pricing system: this 24x7 server-farm consisted of (at last count) ~800 CPUs, pricing ~150 deals per second and producing output for end-of-day, intra-day, price-shock and projections for all of the bank’s exotic deals. Because the pricing models could not be performed (or aggregated) in real-time by the server-farm, the aim of the development was to rebase the delta cash risk metric using cross-gamma data and taking into account live FX and underlying spot prices.

The system architecture consisted of a Windows Service-class aggregation engine which provided (through .**NET Remoting**) data-retrieval, real-time risk rebasing and aggregation services. Two clients of this component were developed: Excel (through a managed implementation of the **IRtdServer** COM interface), and a custom **WinForms** front-end.

The aggregation engine subscribed to Reuters market-data events through the **Reuters SSL COM API**, and subscribed to the pricing-farm’s events over a **WebLogic JMS / TIBCO JMS / TIBCO EMS** bridge system. From these two feeds, it then computed aggregated live risk metrics.

The custom risk-management front-end provided real-time visualization of volatility surfaces (using managed **DirectX 9**), high-performance disconnected virtual datagrids (.NET Remoting and client-side caching) and Excel interoperation via drag-and-drop. The Excel drag-and-drop pasted real-time data into Excel (using the **RTD()** function and a managed IRtdServer COM component.) This allowed traders to get the best of both worlds: the full flexibility of Excel combined with the rich user-experience of a customized front-end.

In addition to my main responsibility of developing this system, I was also asked to develop a managed **Excel XLA** and **XLL** Framework Toolkit. The aim of this work was to allow .NET developers to attribute managed code, and for that code to be exposed to Excel via UDFs and menus. This was accomplished using custom attributes and reflection coupled with code-generation targeting an existing C++ template-driven codebase and extending it with machine-generated mixed-mode MC++. The net result of this was to allow developers without any C or C++ experience to develop Excel add-ins at a fraction of the time (and with far less development risk) than it would take even an experienced developer to create the same functionality using C++. At the time of writing, this framework was in use in the bank by at least three other development teams around the world.

### Barclays Capital ~ Software Analyst & Developer, front-office Commodities

**March 2004 – October 2004**

My role within Barclays Capital consisted of the rapid development of a variety of front-office trading systems, for use on the bank's European and US energy trading desks.

A key project deliverable with which I was tasked was the Strategy Position Viewer application. This managed WinForms application formed part of the bank's larger Strategy Trading project, which encompassed Order Management, Trade Booking and External Pricing achieved the automation of Openlink and multiple trade feed gateways servicing brokers and exchanges such as Spectron, ICAP and the LME. Additionally, synthetic arbitrage gateways contributed to the Position Viewer’s data output, giving traders a real-time view of product positions. The application was fully configurable to an individual trader’s requirements, supporting views of intra-day positions through to positions several years in the future, and supporting the UK Power, Gas and Continental Power markets.

Along with the consolidated position of a given product, the Position Viewer allowed traders to view the position’s constituent trades: External, Internal, Reallocation and Liquidation trade-types were graphically differentiated and custom client-side sorting by Counterparty, Strategy and Instrument along with power-market specific views such as EFA shape, were also implemented.

The application consisted of a mixed-mode **MC++** wrapper for the **Talarian** bus transport, **SQL Server** and **Sybase** trade-stores and a **C# WinForms** client layer coupled with managed custom-draw MC++ visual components.

The rest of the development team for the Position Viewer consisted two server developers, a second client-side developer and a UAT team of six traders. Interaction with, and rapid response to traders’ requests formed a significant part of the role, particularly during UAT phases.

I was also involved with a high-priority project to support the firm’s rapidly growing energy-trading business within the United States: a Feed Processing System was developed and required active maintenance and modification in response to changing third-party data feeds. Several hundred separate data feeds were polled by the FPS, and consolidated data from disparate sources such as HTML, XML and CSV into a unified, high-volume (~70GB, ~500m rows) time-curve database model.

### Microsoft ~ Software Developer & 3rd Line Technical Support

**November 2003 – March 2004**

Microsoft required an addition to their existing team in order to support and further develop their existing global Customer and Partner Experience (CPE) program. This is a key strategic project within Microsoft and our team’s business-users spanned across all of Microsoft’s continental divisions, encompassing some 25,000 end-users.

My role within the team consisted of supporting existing users by rapidly responding to customer change-requests: this involved the development of new functionality as well as the application of hot-fixes to production systems in order to correct business-critical faults.

The CPE program was built on core Microsoft production technologies: **Windows Server 2003**, **Content Management Server**, **NET Framework 1.1**, **C#**, **ASP.NET**, **SQL Server 2000** and **IIS 6**. My technical and development duties within the team encompassed all of these development areas.

### Huntleigh Healthcare ~ Business Analyst & Senior VB, Informix Developer

**July 2001 – November 2003**

1. Detail on request

### X Telecom Ltd. ~ Software Consultant (Voice over IP, VoIP)

**May 2003 – July 2003**

1. Detail on request

### Mehdi and Ward ~ Software Architect / Developer

**June 2001 – July 2001**

1. Detail on request

### InterclubNet ~ Technical Author / Software Developer

**April 2001 – June 2001**

1. Detail on request

### Primark (Thomson Financial) ~ Software Designer / Developer

**December 2000 – April 2001**

1. Detail on request

### IdeaShed ~ Software Architect / Developer

**February 2000 – December 2000**

1. Detail on request

### Racal Telecom ~ Software Architect

**March 1999 – July 1999**

1. Detail on request

### IT Associates ~ Software Designer / Developer

**February 1999 – March 1999**

1. Detail on request

### Northern & Shell ~ Software Designer/ Developer

**November 1998 – December 1998**

1. Detail on request

### Kimberly-Clark ~ Software Developer

**July 1998 – October 1998**

1. Detail on request

### Carland ~ Business Analyst / Software Developer

**April 1998 – July 1998**

1. Detail on request

### Aspen Field Marketing ~ Software Developer

**December 1997 – March 1998**

1. Detail on request

### Wayne Kerr (sic.) Electronics ~ Software Developer

**October 1997 – December 1997**

1. Detail on request

### COM DEV (Europe) ~ Technical Author / Software Developer

**June 1997 – September 1997**

1. Detail on request

## Prior Commercial Experience

### Micro-Ed (MS-DOS) software for schools (own product)

Summer 1992: began writing MS-DOS version in Turbo C (Borland).

Autumn 1993: began marketing MS-DOS version.

Jan 1995: version 5.00 completed with Visual Basic 4.00.

### NextBase (now Microsoft)

Summer 1992: one week work experience working with software developers. C programming in a Windows environment.

### Electronic Data Systems (EDS)

June 1991: two weeks work experience. C programming for engineering applications, including C programming for PCX graphic file viewer.

### Computer Shopper

Nov. 1990 and Jan 1991: prizes won in Programmers' Challenge (age 13), written in C.

### Personal Computer World

Dec. 1990: program published, written in C.

### Computer Park

Residential holiday for computer enthusiasts (1990-93) - Met and worked with programmers from NextBase (now Microsoft.)