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| **Richard Drown** | 57 Rue de l’Aiguillerie  34000 Montpellier  0629665300 [richard.drown@gmail.com](mailto:richard.drown@gmail.com) |

**CAREER PROFILE**

Experienced developer with record of delivering trading & risk systems and databases to traders, quants, floor and risk managers and compliance of trading entities as well as hedge funds. I have worked in a wide range of environments, from IT departments to trading desks, as programmer or lead programmer using many languages, technologies and operating systems. With my IT background, this has given me a very broad view of IT in the financial realm.

I love programming but I enjoy even more the challenge of understanding problems and challenges clients face and delivering solutions that go beyond expectations. This results in a very productive relationship with the client and a bond of trust. Having worked mostly for the front office I am very comfortable working in fast paced and high pressure environments.

SKILLS SUMMARY

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| Trading | Front Office, Algorithmic Trading, Risk Metrics, Value-at-risk, Market & Credit Risk Management, Equities, Fixed Income, Commodities, FX, Market Data, FIX |
| Languages | SQL, Python, C#, Excel/VBA, Java |
| Databases | SQL Server/SSRS, ETL with Python, Sybase, In-memory, Access, SQLite |
| C# | WPF, WCF, Threads, Rebex, SDKs |
| Excel | VBA, Automation, Add-ins, DDE |
| Distribution | 0MQ, ICE, Tibco Rendez-vous |
| Market Data | Activ, Bloomberg, Reuters, Time Series databases |
| Internet | ASP.NET, XML, SSRS |
| Tools | Visual studio 2010, SQL Server 2008R2 |

EMPLOYMENT HISTORY

Jul12 - now  
**First Bank of Delaware**Contract lead developer

Responsibilities:

* Design, implement, rollout and maintain cheque processing platform
* Implement OCR system to read digitized cheques and back-end database
* Client and management ad-hoc data and reporting requirements & support
* Liaise with external application and data vendors
* Inter-system data management
* Shut down and prepare for archival systems no longer used by the bank

Achievements:

* Designed and implemented cheque processing framework for scanning, archiving and historical retrieval, integration with legacy system. OCR process is optimized. All processing steps are automated, event triggered, idempotent and reporting to standard log/alerting system. SQL/Python/SSRS/ExcelVBA
* OCR techonology assessment was performed and Tesseract was selected. More detailed quality, spped and optimisation tests were conducted. The results are factored in the core implementation
* The X937 cheque file format was successfully reverse engineered and implemented in Python
* Implementation of third party audit export interface
* SQL database and stored procedure libraries were implemented following established standards. Statistics are reported via SSRS
* Bank wide standards for file system structure, file naming, SQL databases, SQL libraries, SSRS report creation and Excel/VBA implementation have been defined in conjunction with cheque/EFT, Credit card, Money Services, compliance departments and management.
* After hours support
* Report to CIO

Nov 10 - Aug 11   
Kiski Alpha Partners  
Analyst / Lead developer (2 programmers)

Responsibilities:

* Assess legacy systems, give recommendations and plan new implementation both software and hardware if required
* Support Quants in any data, SQL, VBA requests
* Liaise with outsourced IT infrastructure and 3rd part vendors
* Manage daily IT reporting processes including data imports and exports
* Liaise with client IT staff for operations, new data feeds and on-boarding
* Prepare corporate IT strategy and annual objectives for management and clients
* Support development of new business lines
* Manage new client on-boarding process
* Manage IT consultants
* Software development
* After-hours support
* Report to COO

Achievements:

* Designed and implemented Kiski’s new hedge fund risk reporting system. All report implementation is standardized and follows a rigorous and testable process. All SSRS reports are implemented by corresponding SQL procedure libraries and common SQL is implemented in core libraries. Naming, calling convention and testing is standardised
* SQL libraries are available to programmers and quants alike via SQL or a custom Excel SQL add-in for data/analytics retrieval/storage
* Calculations are documented using the new SQL library stored procedure documentation
* Standardized the implementation of new client interfaces and data feeds
* A parameterised function to trigger SSRS reports is available in SQL, powershell, C#, VBA
* Log and alerting system is implemented using SSRS/SQL, email, SMS, twitter with the ability for user/application defined action rules. SQL/C#/VBA/Python interfaces are implemented and in use.
* Operations/alerting/report previews are viewable via SQL triggered SSRS emailed reports. Actions can be triggered automatically by user response to emails running pre-defined scripts. Client reports can be triggered by email for after-hours support.

Nov 10 - Aug 11   
**First Bank of Delaware**Lead developer

Responsibilities:

* Install, configure and maintain cheque processing platform
* Develop and operate Federal Reserve financial transaction interface
* Client and management ad-hoc data and reporting requirements & support
* Money Service Bureau staff application development and support
* Liaise with external application and data vendors
* Credit Card processing systems support and development
* After hours support
* Report to CIO

Achievements:

* Design, development and delivery of Electronic Fund Transfer matching service
* AllMyPapers cheque processing software has been successfully tested and rolled out. Bugs were found and modification were specified and forwarded to 3rd party for correction and implementation.
* Bank wide log and alerting system is implemented using SSRS/SQL, email, SMS, twitter with the ability for user/application defined action rules. SQL/C#/VBA/Python interfaces are implemented and in use. Email processing was implemented using Rebex
* Implementation of third party audit export interface
* SQL database and stored procedure libraries were implemented. An automation & alerting framework for operations and maintenance was created
* A parameterised function to trigger SSRS reports is available in SQL, powershell, C#, VBA. SSRS reports can therefore be triggered programmatically in response to events
* Bank wide standards for file system structure, file naming, SQL databases, SQL libraries, SSRS report creation and Excel/VBA implementation have been defined in conjunction with Cheque/EFT, Credit card, Money Services, compliance departments and management.
* SSRS/SQL reporting was standardized in how they are created and how they interface with SQL libraries. Change management was implemented in conjunction with the help desk.
* Installation and programming of bank-wide process scheduler was performed using JAMS
* Loan application fraud detection and credit check was implemented using the LexisNexis .#Net web service

May 08 – Oct 10   
**Keystone Trading Partners**Lead developer

Responsibilities:

* Support all IT aspects of the company
* Manage installation, operation and coding of low-latency market-making/streaming platform Actant.
* Liaise with clearing entity Merrill Lynch for IT, trade or risk issues
* Support 3rd party trade platforms: MicroHedge, Redi, Sterling, etc
* Risk reporting
* Develop a new core system to integrate disparate 3rd party systems
* Liaise and test with Philadelphia Stock Exchange PHLX
* Support all traders
* Manage IT developers
* Manage infrastructure, hardware purchases, software and data licensing
* After hours support
* Report to CEO

Achievements:

* Successful implementation of new market-making systems. 300 option chains traded or 5000 options. Rules are customized, real-time custom proprietary parameters implemented. Auto-hedging using Actant’s Aqtor scripting DOM model automation and Sterling auto-hedge implemented successfully. Load balancing between servers implemented
* Implemented proprietary trade and risk databases including start-of-day reports and tables from Merrill.
* Full life-cycle advanced daily Excel/VBA trading position & risk reports, using Excel templates and generating PDFs for archive and alert emails
* Full SSRS reporting with modular SQL report and core libraries successfully implemented
* Live Risk console with position tracking implemented in Excel/VBA
* RAD trading algorithms implemented in Excel/VBA including trade execution history for auditing
* In memory database design & implementation C#/SQL/ICE
* Algorithmic trading framework implemented using in-memory database
* RuleRunner process to execute algorithms. Algorithms implemented in C# and proprietary C# class library. Market data provider Activ wrapped up in rule interface.
* FIX gateway implemented using QuickFix
* Trading/Risk front-end delivered C#
* Log and alert service implemented using in-memory database with gateways to email and SMS
* Integration of data feeds, Bloomberg, Activ, Merrill Hard-to-borrow, news feeds
* Automated all data import/exports with error conditions reported to corporate log/alert service

Feb 07 - Apr 08   
**Credit Suisse**Senior Developer

Responsibilities:

* CSFB/First Boston trade bridge development
* Fixed income options price capture and database
* Trader excel support

Achievements:

* Successfully implemented a new trade bridge between the two internal trading systems using C#.Net, Sybase, XML & XSLT. The server and admin client were handed over to production.
* Delivered price capture service with administration console. Users can validate the data captured and force a refresh if a failure of the underlying market data service is encountered. C#.Net, Sybase 11, Excel/VBA, Reuters SSL/RMDS, XML & XSLT. Support was trained and the service was put into production
* Successfully migrated complex Market Status real-time spreadsheet to a windows service. The spreadsheet layout is implemented by DataTable and executions rules defined in XML configuration file. All Excel dependencies were implemented by using underlying add-in DLLs or newly created web services interfaces. Status reports are emailed by authorized users sending an email to a fixed @credit-suisse.com email address. C#, XML, Reuters, MAPI

Jan 06 – Oct 06   
**TPG-Axon**Lead Developer

Responsibilities:

* Operation of VaR reporting
* Set coding standards and define IT software architecture
* Manage and coach IT developers
* Trader & after hours support
* Report to CIO

Achievements:

* Automated Risk Metrics VaR upload/download and position/strategy data feed from the internal trading system
* Successfully managed the migration of the risk database data and function from MS Access to SQL Server. Refactored and automated all manual Excel/VBA trading and risk sheets to use new SQL infrastructure. Decommissioning of MS Access databases
* Isolated all data export/import activities and re-engineered an environment to perform ETL tasks under task scheduler and SSIS
* Investor risk reports generated by automating Excel and generating a report PDF to then be mailed to various distribution lists internally and externally
* Index component & pricing data implemented by a windows C#/SQL service connecting to Bloomberg
* Installation of SSRS and successful implementation of basic reports

Sep 04 – Dec 05   
**Hoboken Fund**Lead Developer

Responsibilities:

* All aspects of IT, including specifying, purchase of workstation, server and network hardware and software, installation and configuration of trading software, liaising with vendors
* Software development
* Trader & after hours support
* Report to partners

Achievements:

* Successfully got start-up on it’s feet IT wise
* Developed core trade server for position keeping and risk management. Trade and risk front ends are built Excel/VBA. The morning trade summary is generated automatically by an Excel/VBA sheet.
* Integrated custom data feeds into Excel using RTD interface
* Implemented proprietary trading algorithms in Excel/VBA

Aug 03 - Sep 04   
**Schwab Capital Markets**Developer

Responsibilities:

* Program Trading desk IT support
* Liaise with PT dept., trading infrastructure IT, block-box desk and mid-office
* East-coast disaster recovery
* Software development
* Trader & after hours support
* Supply external trading consultants with various trade feeds for performance analysis
* Report to PT IT in San Francisco

Achievements:

* Decommissioning of legacy FlexTrade systems
* Successful transition to proprietary PT system
* Implemented FIX line monitor tool to investigate trading issues Java/Swing
* Automated morning trading tests
* Performed trade/P&L analysis for PT dept

Aug 02 – July 03   
**Knight Securities**Lead Developer, VP

Responsibilities:

* Program Trading IT support
* Liaise with different IT groups and mid-office
* Customers and exchanges FIX connectivity
* Trader & after hours support
* Report to head of desk

Achievements:

* Successfully implemented FlexTrade rollout to desk, including trade rule creation and test as well as FIX connectivity testing
* Delivered VWAP curve service from raw execution feed with Excel/VBA front-end for traders to manage the curve data. TibCo Rendez-vous, Sybase, Java
* Integrated Bloomberg API stock fields into Flex interface for use in trading rules. C++, pthreads, Solaris
* Implemented a real-time Flex to the core Brass system for Flex PT/Knight position management. C++, pthreads, Solaris
* Designed and implemented replacement PT trading platform to lower costs including server and front end. Java, Sybase, TibCo Rendez-vous

May 99 – Jul 02   
**Goldman Sachs/SLK Capital Markets**Senior Developer

Responsibilities:

* Core trading system enhancements C++
* Program trading desk support
* Trading floor and mid-office support
* Systems architecture

Achievements:

* For the Program Desk, successfully rolled out the TLW trading platform, automated order management, conversions, customer and internal report generation and integration with Bloomberg API. VB, Access, Sybase
* For sales traders and stock traders delivered and web application to manage customer details, holdings, indexes, sectors & industries, trading teams, order history data for daily and index rebalancing trades e.g. Russell, S&P, NDX, etc. VB, ASP, Sybase, Perl
* For the Purchasing & Sales Dept., developed a real-time automated allocation acceptance algorithm with server and front end Thomson Financial's Oasys Direct. Java/Swing, ASP, Sybase
* For the Systems Dept., built an XML gateway to the core system for real-time trading data, a smart order router, an XML real-time clearing feed and a load balancing process for processor pool optimization C++/Solaris

Jul 97 – Apr 99  
**Cititrade**Senior Consultant. Software, consulting and outsourcing. Managed multiple assignments and projects for Merrill Lynch, Dresdner Bank, American Express, Deutsche Bank and PalmTrader. C/C++, SQL, Excel/VBA

Jun 96 – Jul 97  
**Salomon Brothers, London**Front Office programmer. Fixed Income Derivatives Research quant support. Historical market data framework for Model optimisation, spreadsheet add-ins, time series & interest rate curve database implementation in Fame/Sybase. Solaris/SunOS, Fame, Sybase, Applix, Excel, C/C++, Java

Nov 93 – Jun 96  
**Chase/Chemical Bank, London**FX trading support & development. Market data services development and associated tools. Application Architecture Group for technology assessments and implementing prototypes, portfolio server development. C/C++, Excel/VBA

EDUCATION

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| 1995 - 1996 | **Corporate Finance Evening Programme**  London Business School |
| 1992 - 1993 | MSc Advanced Methods in Computer Science  Queen Mary & Westfield College, University of London  Parallel and Distributed Computer Systems stream |
| 1987 - 1991 | **BSc in Computer Systems Technology**  Polytechnic of Central London |