# CURRICULUM VITAE
## MARK HALLETT

OVERVIEW

Undertaking my work with a conscientious and structured approach I have produced a track record of successfully completed projects.
I have a desire to produce solutions that meet business needs, are implemented smoothly and provide ongoing benefits.Strong design and documentation skills help to provide solutions that are easy to hand over, use, and maintain.
In addition to my core technical skills I have a solid knowledge of financial products, and good interpersonal skills.

 I have attended London based meet-ups, these include PyData, London Python, and Docker.

General development experience
- 18 years Code design, development, test, release and maintenance.
- 14 years Python SQL and Front Arena development.
- 4 years C++, development.

Academic and professional qualifications

2012    Intermediate Certificate in Software Testing (BSC)
2011    Certified Tester Foundation level (BSC)
2011    Chartered Institute for Securities & Investment - 'Global Securities Operations'
2006    Front Arena Certified Professional
2000    Chartered Engineer by the Institute of Electrical Engineers

1989 -1994 Manchester University (sponsored by Rolls-Royce)
Course:	Electrical and Electronic Engineering with Italian
Grade:  2:1 M Eng

HOME PROJECT

Over the past 18 months I have been developing python code for real-time data analysis in python.
This uses a dataflow technique, that listens and writes to a cloud based message bus. The web server takes data via a RESTful API and connects to the browser using web sockets. Each component can be  distributed using Docker and Docker hub.
(Github - MarkHallett/ MySite )


EMPLOYMENT HISTORY

ICBC Standard Bank
Front Arena Consultant                                          March 2013  - November 2017

I looked after the day to day support of the system until it was decommissioned. As well at working on development of larger scale projects, and creating a new Disaster Recovery strategy by moving on to virtual servers, using python and sql I have created tools for front, middle, and back office departments.

I have developed and supported:
- Python SQL Ksh apps and scripts.
- Bloomberg TOMS to Front interface (Bonds and Repos).
- TOMS to Front reconciliation
- Counterparty feeds into Front
- Enhanced feed and report functionality for regulatory purposes.
- Run trioptima cycles to reduce the banks notional exposure.

Investec
Developer                                                   June 2009  - December 2012
Contract Developer                                         March 2009 - April 2009

While at Investec I:
- Created a transactional cashflow database, and populated it with data using SQLAlchemy.
- Written python scripts for profit and loss explanation (the greeks) and for risk factor analysis.
- Built a system release mechanism using Apache's Continuum.
- Created charts showing the overnight runs using Matplotlib.
- Attended the python conference PyCon 2010 in Birmingham.
- Produced html/pdf reports from trade data and attached them to the trade screen menu.
- General support and maintenance.
- The main products have been based around structured equities, bonds, and exotic options.
- Interviewed applicants for developer/support positions.


CQS (Hedge Fund)
Front Arena Specialist                                     Sept 2007 – March 2009

While at CQS I worked on the core Front Arena development. This involved:
- Managing the Prod, DR, Dev and Test environments (servers, components, and data).
- Creating tools for support and development using wxPython. This resulted in more accurate and auditable data updates.
- Updating instruments and prices from numerous sources.  Connections to both Bloomberg and Reuters provided necessary contingency in data supply.
- Upgrading Front Arena, I played a central role in the data conversion and environment management for a major upgrade.
- Development and scheduling of intraday and over night mark to market processes.
- Building an Asgård test framework. This could test valuations of instruments built from their constituent parts, as well as test values in trading manager columns.
- Interviewed applicants for developer/support positions.


Standard Bank
Front Arena Analyst / Developer                            Feb 2003 – Sept 2007

I held key technical positions for the banks trading position, management of risk, and the support of trading desks. The main skills used were, Python, SQL and ksh.
- Won 'Best in Service award' for excellence March 2007.
- Worked in New York to fix performance and time zone issues.
- Split an old NT server into file and app servers, as well as creating Test and Live environments with more robust permissioning. This resulted in a more stable and secure environment, an increase in performance, and more reliable code maintenance.
- Worked closely with the Front Office to develop position reports, asset ladders, EOD price capture, Profit and Loss reports, and trade entry screens.
- Successfully managed the re-writing of code to produce Repo margin reports. This vastly improved the performance, accuracy, and maintainability of the code.
- Interviewed applicants for developer/support positions.


Goldman Sachs
Contract Support / Developer                               Sept 2001 – Feb 2002

Main responsibilities:
- Worked in the credit risk department providing user support for data retrieval the Bank's exposure to sovereign and counterparty risk.
- Used HTML to applications, and monitored the daily data flows. Trade data was loaded on the database before being used to calculate enhance web sites.
- Wrote Perl scripts to email notification of new or updated counterparties that should be considered for high risk status.

Morgan Stanley
Contract Support / Developer                                    July 2000 – July 2001

Main responsibilities:
- Worked in a team providing on going support and development to a large trading application. The application was written in C++, developed on UNIX and was driven by a Sybase database. It provided trade entry and order management for traders and enabled allocations of executions.
- Performance tuned stored procedures to increase their efficiency and maintainability and created a new date retrieval process for returning global settlement dates from the database.
- Developed Perl and shell scripts to collect regression test data, and to automate the build and release procedure.
- Supported the application, requiring static data changes on production databases for account, customer, product and exchange information. The role included second level support for traders and operations.
- Provided technical assistance to operations to enable them to maintain their Perl scripts and stored procedures.
- Wrote C++ classes to speed up calls to retrieve static data. They overrode the RogueWave implementation classes, and cached and persisted the results of database lookups.


Standard Chartered Bank
Developer                                                       April 1998 - July 2000

Main responsibilities:
- Responsible for a C++ application, including Sybase tables and stored procedures, from design through to implementation and support.  I managed the release, installation and configuration of the application during the global multi site test and roll out.
- Worked in the Hong Kong offices of Dow Jones to understand the design and implementation of a C++ app which collected, validated and stored market rates. I migrated the source code of the application to the Bank's development environment.
- Maintained the code that wrote and retrieved web pages from the database and populated them with data.


GenRad
Applications engineer                                          Feb 1996 - April 1998

Main responsibilities:
- Developed and maintained software based on C++ which was used by technicians as a diagnostic tool for automotive systems (e.g. ABS, security, and engine management). While designing the code, maintenance and flexibility were important.
- Responsible for applications throughout their complete life cycle and for tracking the code through the test and validation process. Comprehensive documentation was kept of the validation and code changes. Fixed dates for code release demanded accurate forecasting and scheduling of work.


Ingersoll-Rand
Projects Department – Graduate                                 Aug 1994 - Feb 1996

- Managed a number of contracts interfacing standard products into bespoke systems. Work included bid preparation, system design, placement of orders, and supervision of contractors.


Rolls Royce
Sponsored student                                              Sept 1989 – Sept 1992

- Wrote software to sift and send large amounts of test data between computers. The project involved developing connection protocols and data handling techniques that were new to the company.