

Brett Hutley
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I am a software developer with over 15 years experience working for financial institutions in Sydney, New York and London. I have built numerous systems from scratch – primarily front and middle office financial systems, but also web-based and networking applications. I am the founder and primary developer of the [Risk Quantify](#) project – an open source financial library. I have developed software that won Risk Magazine's "[Risk Management Product of the Year](#)" award for 2004. I have a lot of experience developing for both Windows and UNIX environments. I am considered an expert on C and C++, but also have experience working with many other programming languages. I am highly qualified in the area of computer system security.

Education

- **Macquarie University** Australia
Master of Applied Finance, 1999
- **Wilmott / 7City** United Kingdom
Certificate in Quantitative Finance, completed Dec 2005
- **Wilmott / 7City** United Kingdom
Certificate in Mathematical Methods, *expected completion Dec 2006*
- **ISC2** United States
Certified Information Systems Security Professional, 2001
- **SANS Institute** United States
GIAC Certified Incident Handler, 2001
- **SANS Institute** United States
GIAC Certified Intrusion Analyst, 2004

Work History

- **Quantitative Programmer** September 2005 - ongoing...
EDF Trading London, United Kingdom
 - I am currently working for the Structured Derivatives group at EDF Trading, working on the systems to manage energy derivatives.

Technologies

Java
C++
Ruby
Shell Scripting
MySQL

Environments

Linux
Windows 2000/XP

- **Consultant/Senior Programmer** January 2005 - May 2005
IT&e London, United Kingdom
 - Consulted to HSBC in London to help extend IT&e's RAZOR risk management software to develop simulation-based reporting for managing a new investment vehicle.

Technologies

C++
PERL
Shell Scripting
SQLServer

Environments

MS Windows 2000/XP

- **Senior Developer** October 2000 - November 2004
IT&e Sydney, Australia
 - A principal developer on IT&e's RAZOR risk management software. This software implements Monte Carlo methods to analyse Credit and Market risk and won Risk Magazine's "[Risk Management Software of the Year](#)" award for 2004. I designed and built several of it's core components, and was responsible for implementing all it's pricing models. I also wrote the interpreter that processes the business logic of mapping trades to portfolios. I was responsible for the UNIX port of the Razor code base.
 - Developed the main components for IT&e's Clarite XML-based middleware. This middleware is used in products developed at IT&e and is being used globally in critical systems by several international clients.
 - Developed a server for providing stock and option pricing data to the Commonwealth Securities web servers in real-time. The Commonwealth Securities web site is one of Australia's busiest sites handling millions of hits a day, and this server is a critical component for the site.
 - Developed a deal blotter in Java for a web-based FX derivatives system called PLEXUS.

- Set up a custom web-based system for project management, tracking bugs, documentation and task management based on the <http://sourceforge.net> SourceForge code base.

Technologies

C++
PERL
LISP
Java
PHP
SQLServer
Oracle
MySQL

Environments

MS Windows 2000/XP
Linux
Mac OS/X
Solaris

- **Chief System Development Officer** March 2000 - September 2000
Binary Mind Corporation Sydney, Australia

- Developed a web application for allowing clients to create surveys that could be served from their sites, but the data was collected and analysed on our own site. We would then provide statistical comparisons of how visitors viewed the web site in comparison with competitor's sites.

Technologies

PERL
C++
Javascript
Oracle
PostgreSQL
CORBA

Environments

Linux
MS Windows 2000/XP

- **Contract Programmer** October 1999 - February 2000
EDS Sydney, Australia

- Developed enhancements for PRISM FX derivatives front-office system used by Commonwealth Bank.

Technologies

C++
SQLServer
COM

Environments

MS Windows 2000/XP

- **Contract Programmer** January 1999 - October 1999
St George Bank Sydney, Australia

- Developed two applications that were sent out to corporate clients on a branded CDROM – “Interest Rate Risk Manager” and “FX Risk Manager”. These applications allow clients to put in their exposures, and then select various products to hedge the exposures. Clients can examine their risk profile after the hedging financial products have been added to their portfolio.

- Created an CORBA-based application to allow Reuter's Kondor system to feed MKI's Infinity system.
- Created an application to allow users to view the NEON Message Queue.

Technologies

C++
Sybase
CORBA

Environments

Solaris
MS Windows

- **Contract Programmer** 1998
Commonwealth Bank of Australia Sydney, Australia

- One of the principal developers of the CSPARQ Monte Carlo-based Market Risk Management System which is used to satisfy the CBA's VaR reporting requirements to the Reserve Bank of Australia.

Technologies

C++
Oracle

Environments

MS Windows

- **Contract Programmer** 1997 - 1998
Dresdner Kleinwort Benson Sydney, Australia

- Developed a system to manage Dresdner's Futures positions. This system provided both front and back office functionality.

Technologies

C++
Sybase
MS Access

Environments

MS Windows

- **Contract Programmer** 1996 - 1997
Commonwealth Bank Australia Sydney, Australia

- Developed the pricing and business-logic side of the PRISM FX derivatives system which was used to manage all of CBA's FX derivative business. This system provided real-time pricing and position keeping for the FX desks in Sydney, New York and London.

Technologies

C++
SQLServer
COM

Environments

MS Windows

- **Contract Programmer** 1995 - 1995
Oppenheimer Emerging Market Fund Manhattan, New York

- Developed software for managing and revaluing the fund's positions, and ensuring capital allocation targets were maintained.

Technologies

C++
MS Access
COM

Environments

MS Windows

• **Programmer**

Deutsche Bank / Bain and Company

1993 - 1995

Sydney, Australia

- Worked with the equity derivatives desk to build a system to manage their positions. Developed the TIARA system which was initially used to manage the float of the first warrants sold in Australia, and was the primary front office system for pricing and trading equity derivatives. I implemented Analytic, Binomial, Finite Difference methods, and Monte Carlo pricing algorithms within TIARA.

Technologies

C/C++
Sybase
Motif

Environments

SunOS

• **Programmer**

Dresdner Australia Limited

1990 - 1993

Sydney, Australia

- Developed software to consolidate Dresdner's positions for credit risk analysis, exposure and limit reporting.
- Developed software that provided a central server for automated facsimile transmissions.
- Modified existing FRA trading software to correct the pricing model.
- Administered a SunOS-based system for trading Precious Metals.

Technologies

C/C++
dBase/Clipper
x86 Assembler
Sybase

Environments

DOS
MS Windows
Novell Netware
SunOS

Skills

Languages: C, C++, Java, Perl, Python, Bourne shell scripting, SQL, HTML, XML, \LaTeX , PHP, Javascript, Scheme/Lisp

Systems: Linux, Windows 95/98/NT/2000, Solaris, OpenBSD, MacOS/X

Applications: Visual Studio, Borland C++Builder, Excel, Mathematica, Apache

Databases: SQLServer, Sybase, Oracle, MySQL, PostgreSQL, MS Access

Misc: Computer security, UNIX system administration, TCP/IP networking, strong verbal and written communication skills, excellent troubleshooting and debugging skills.