

Maurice Naftalin – Curriculum Vitae

Personal Details

Name: Maurice Naftalin
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Marital status: Married, four sons (b. 1985, 1990, 1993(twins))
Health: No health problems

Education and Qualifications

Sun Certified Java Programmer
Member of the British Computer Society and Chartered Engineer
MSc, Chemical Spectroscopy, University of East Anglia.
BSc(Hons), Chemistry, University of Southampton.

Overview

Instructor in Java, J2EE, Servlet/JSP, EJB, Swing, and Unix for Learning Tree and Sun. Over 20 years in IT, as developer, researcher, designer, manager, and teacher. Very strong programmer, with background in application and systems level development and in Internet technologies. Effective communicator, both face-to-face and in writing. Experienced negotiator. Classroom and one-one training skills. Hands-on manager and team builder, experienced in quality management, audit experience.

Technical Competencies

Programming languages: Java(1.0 to 6), C, SQL, Perl, LISP, Prolog, C++, Pascal
Design: OO design with UML, GoF and J2EE design patterns
Enterprise APIs: JDBC3.0, Hibernate 3, Spring 2, RMI, EJB2.1 (some EJB3), JMS, JSP, Servlets, JNDI, JAXP, JDOM, dom4j, JavaMail, Servlets, Java Web Start
GUI programming: Java Foundation Classes (incl. Swing)
Command languages: Bourne and Korn shell scripting
Operating systems: Unix (various, esp Linux and Solaris), Windows 2000/XP
Application servers: Websphere 5, Tomcat 5.5
Other: XML, HTTP, Ant, JUnit, XP/Agile, CVS, Subversion, ISO9001, domain experience in database applications, operating systems, user interfaces, multimedia, Web design, retail systems

Career Summary

1996 – Director, Morningside Light Ltd. I spend about a quarter of my time teaching for Learning Tree – mainly Java (J2SE, J2EE generally, Servlets/JSP, Spring/Hibernate) – also introductory C programming and Unix. I am the Technical Editor for Learning Tree’s advanced Unix utilities course, and have delivered courses on Unix and Java for numerous other clients.

I am co-author of *Java Generics and Collections*, (O’Reilly, 2006) the primary reference to many of the most important new features introduced in Java 5 and Java 6. I regularly present at conferences and other forums, including JavaOne 2007. I am an Honorary Fellow of the University of Edinburgh School of Informatics.

Recent engagements for Morningside Light include

- 10/05 – At the Department of Work and Pensions, I have managed a team of ten Swing/Visual Age programmers working for EDS on the JobPlus Customer Management System, with overall responsibility for planning, implementation, quality control and delivery of the client-side code for Release 5 of CMS, and for mentoring and day-to-day management of the team.
- 8/02 – 10/03 At NSB, a software house specialising in the retail sector, I jointly oversaw the transition of a team of 30 from RPG/green-screen technology to a three-tier Java application with both Swing and HTML presentation. At the outset I was in a team of two designing the basic system architecture; subsequently my roles included designing two large Swing application, extensive mentoring and design reviews in OO methods, team leadership, course delivery, and latterly substantial implementation work. The application was hosted on Tomcat for development, then deployed to both Weblogic and Websphere. The thick client is delivered via Web Start, authenticated via HTTP, then communicates through an RMI layer which I designed.
- 6/00 – 12/01 I designed, directed and taught the Java section of an advanced induction course for a leading merchant bank. In this section, the students learned about enterprise

- Java technologies, and applied their knowledge in enhancing a working system, which I wrote. The case study was a stock trading system, which I implemented twice—first as a three-tier EJB system deployed on to Websphere, then—when this was thought too difficult for the students—in two tiers with a Swing front end connected to a Sybase database. The development environment was VisualAge for Java. I subsequently taught the practical section of the course several times.
- 10/99 – 6/00 An operational support company based in Fife were working on a system to enable different digital satellite networks, each with their own customer management database, to use a common broadcasting infrastructure. I initially managed the team writing the common Swing front end to the databases. During this time I proposed replacing most of the socket-based communication with JMS. I designed and prototyped the solution that they eventually adopted.
- 5/99 – 11/99 Strathclyde Police Authority: consulted with them over a six-month period. A team inexperienced in Java, they were building a distributed control application with a complex user interface implemented in Swing. They required the application to be distributed over RMI and for the user interface to be updatable remotely. I designed and prototyped a solution and mentored them during the early implementation stages.
- 3/99 – Technical consultation work for Forthright Innovation, a local enterprise company. I have done several studies for them on companies or projects that they were considering supporting, including an assessment of the potential of a website design tool which produced agent-enabled websites, and a feasibility study on a service which would enable a local mapmaker to support GPRS device users.
- 6/98 – 10/98 The Department for International Development were converting from a mainframe system to Unix and required to rewrite their command scripts in the Korn shell. I provided one-to-one teaching consultation services to them over four months and wrote some of the scripts myself, about two thousand lines.

Lloyd's Register (1992 – 1996)

Consultant Software Engineer then **Project Manager**, Lloyd's Register of Shipping. From 1992 to 1995 I managed the Esprit project LaCoS (“Large-Scale Correct Systems Using Formal Methods”), which aimed to bring the RAISE specification language and development method to industrial maturity. As PM I was responsible for planning and resource allocation; directing technical work; ensuring conformity with LR operating and quality standards, staff supervision and appraisal; steering the RSL language through the early stages of international standardisation; and relations with clients, the project consortium, and the EC.

My technical work at LR included

- 6-month Royal Society fellowship to study application of advanced theorem-proving techniques to industrial software development and verification. I used Prolog to formalise the strategy for a large class of proofs of developments from LR's industrial experience.
- in the LaCoS project I directed and participated in the following technical tasks:
 - case-study specification of an engine control system, carried out for a major motor manufacturer; the specification was translated into C++ prototype. The prototype required substantial modification, including the rewriting of many modules and the production of a test harness.
 - construction of an Ada library of reusable system components developed from equational specifications
 - specification and prototyping in Ada of a warehousing and transport simulation system.
- analysis work with the static analysis toolkit MALPAS verifying the Primary Protection System of the Sizewell B nuclear power station

Research Fellow, Stirling University (1984 – 1992)

I taught programming, computing science and formal methods and pursued research on specification and refinement methods.

- Developed a Hypercard “refinement editor” for graphical visualisation and manipulation of formal program developments and specifications.
- On the Esprit real-time development project DESCARTES, I led the activity of integrating the real-time specification system Statemate with a functional specification language. Specified, designed and tested the integrated system; specified the new facilities for Statemate; and reimplemented the functional language system, which included writing a compiler and a polymorphic typechecker – about ten thousand lines of VMS Pascal and C.

Senior Lecturer, Wolverhampton Polytechnic (1982 – 1984)

I taught programming, computing science and formal methods and pursued research on specification and refinement methods.

Team Leader, ICL (1977 – 1981)

- Leader of support and maintenance team for all VME record-level file management software.
- Developed new and improved facilities in the “slow device” (terminals, printers, etc.) record access manager. Responsible for development from subsystem design through to coding and testing.
- Support and tuning of the syntax and lexical analyser components of the System Control Language subsystem of VME (then VME/B). Bettered marketing targets for this performance-critical code.
- Detailed design and coding in the reimplementaion of the same system.

Software Programmer, British Steel Corporation (1974 – 1977)

Worked on a compiler for an operational research language, written in assembler.