

<b>Name</b>	Dino Fancellu	<b>Github</b>	<a href="https://github.com/fancellu">https://github.com/fancellu</a>
<b>Email</b>	<a href="mailto:dino@felstar.com">dino@felstar.com</a>	<b>Nationality</b>	British
<b>Address</b>	Epsom, Surrey	<b>Status</b>	Married
<b>LinkedIn</b>	/in/dinofancellu/	<b>Website</b>	<a href="http://felstar.com">http://felstar.com</a>

**SKILLS SUMMARY**

<b>Business</b>	Derivatives, Risk, E-Commerce, FX, SWIFT, Settlement Systems, Data Feeds, FpML, Integration, Publishing
<b>Design</b>	UML, Relational Databases, Object Oriented Design, Software QA, TDD, BDD, Functional Programming, ETL, EAI/EIP
<b>Client</b>	Applets, RIA, HTML5, AJAX, jQuery, JavaScript, D3, Swing, GWT, SVG, Vaadin, Play, Scala.js, Ractive.js, Vue.js, Velocity.js
<b>Server</b>	J2EE, EJB, JDBC, JUnit, Ant, Maven, JNDI, JSP, JSTL, Struts, Servlets, Weblogic, WebSphere, JBoss, Spring, Hibernate, MapReduce, XCC, MongoDB, NoSQL, Akka, Actors, SBT, Spark, GraphX, Breeze
<b>Message</b>	XML/XSLT 1.0/2.0/XPath, XQuery, SAX, JAXB, SOAP, RMI, JMS, Spring-WS, Spring Integration, MQ, JBossMQ, ActiveMQ, Camel, EMS, Sockets, XQJ, Netty, RDF, Hazelcast, Ignite, Spray, Akka HTTP
<b>Languages</b>	Scala, JAVA, XSLT, XQuery, Python
<b>Database</b>	SQL Server, Sybase, Oracle, PL/SQL, MarkLogic, Neo4j, ElasticSearch, MySQL
<b>O/S</b>	UNIX, Linux, Microsoft Windows, Docker
<b>Benchmark</b>	Score of 99% quartile on <a href="#">Brainbench</a> Java 2 and <a href="#">HTML</a> benchmark. Score of 100% quartile on TekCheck <a href="#">JDBC</a> , <a href="#">Java 2</a> , <a href="#">Server</a> benchmark

**WORK SUMMARY**

<b>Director</b>	<b>Felstar Ltd (Own Ltd Company)</b>	<b>Jan 2000 - Present</b>
<b>Scala Developer</b>	Atos/HMRC	May 2017 – Dec 2018
<b>Scala Developer</b>	Atos/HMRC	Aug 2016 – Oct 2016
<b>Scala Developer</b>	On Track Retail	Feb 2016 - May 2016
<b>Senior Scala Dev</b>	CAXIS	Mar 2015 – July 2015
<b>Scala Lead Dev</b>	Inkflash	Oct 2014 – Mar 2015
<b>Java Engineer</b>	HSBC Global banking and Markets	May 2014 – Oct 2014
<b>Scala Engineer</b>	Barclays Corporate	Aug 2013 – Jan 2014
<b>XSLT Developer</b>	TSO	Apr 2013 – July 2013
<b>Integration Dev</b>	Standard Bank	May 2011 – Sep 2012
<b>Java Developer</b>	HSBC Global banking and Markets	Jun 2010 – Sep 2010
<b>eCommerce STP</b>	Unicredit Bank	Mar 2010 – May 2010
<b>XQuery Developer</b>	JPMorgan Chase	Aug 2009 – Mar 2010
<b>Java XML Developer</b>	Reuters PLC and Thomson Reuters PLC	Jan 2008 – Nov 2008
<b>Java XSLT Developer</b>	Fitch Ratings PLC / ValuSpread	Oct 2006 – Nov 2007
<b>Java XSLT Developer</b>	Elsevier Science Ltd	Mar 2006 – Oct 2006
<b>XML Contractor</b>	Fish4.co.uk	Feb 2005 – Dec 2005
<b>J2EE Contractor</b>	Misys International Banking Systems	Sep 2004 – Jan 2005
<b>Senior Contractor</b>	Capula/Elan Ltd	Jan 2004 – May 2004
<b>Senior Contractor</b>	Invokon Ltd	May 2002 – May 2003
<b>Contractor</b>	Javelin Software Ltd	Oct 2000 - Oct 2001
<b>Contractor</b>	pensionsbusiness.com	Oct 2000 - Oct 2001
<b>Contractor</b>	Sapient/Assertahome.com	Mar 2000 - Jun 2000
<b>Contractor</b>	LastMinute.com	Jan 2000 - Feb 2000
<b>Senior Developer</b>	Future State Technology	Jun 1996 - Nov 1999
<b>Senior Developer</b>	Fusion Systems Ltd	Jan 1996 – May 1996

**EDUCATION SUMMARY**

<b>1983-1985</b>	North East Surrey Technical College	3 A-Levels (Computers, Physics, Pure Maths)
<b>1978-1983</b>	Alleyn's College, Dulwich.	9 O-Levels

<b>EMPLOYER</b>	<b>FELSTAR LTD</b>	<b>Jan 2000 – Present</b>
<b>POSITION</b>	<b>CONSULTANT / DIRECTOR</b>	
<b>CLIENT</b>	<b>Atos/HMRC</b>	<b>May 2017 – Dec 2018</b>
<b>BUSINESS</b>	Working on Help To Save for HMRC <a href="https://www.gov.uk/government/publications/help-to-save-policy-design">https://www.gov.uk/government/publications/help-to-save-policy-design</a>	
<b>TECHNOLOGY</b>	<b>Scala, Play Framework, ScalaTest, Mockito, HTML 5, GDS, Java, Fuse, Junit, JAXB, openhtmltopdf</b> Code reviews, new features, bug fixes, porting to Play 2.5.x	
<b>CLIENT</b>	<b>Atos/HMRC</b>	<b>Aug 2016 – Oct 2016</b>
<b>BUSINESS</b>	Working on Tax Free Childcare for HMRC <a href="https://childcare-support.tax.service.gov.uk/">https://childcare-support.tax.service.gov.uk/</a>	
<b>TECHNOLOGY</b>	<b>Scala, Play Framework, Guice, Spray, ScalaTest, Mockito, HTML 5, Jenkins, GDS</b> Code reviews, Bug fixing, Major refactoring, <b>SBT</b> improvements, porting entire front end to Play 2.5.x	
<b>CLIENT</b>	<b>On Track Retail</b>	<b>Feb 2016 – May 2016</b>
<b>BUSINESS</b>	Working in the train ticketing space. <a href="https://www.ontrackretail.co.uk/">https://www.ontrackretail.co.uk/</a>	
<b>TECHNOLOGY</b>	<b>Scala, MySQL, Slick, scalaxb, Spray, Akka, Akka-Http, Kanban, npm, handlebars/mustache, Kamon, grafana, statsd, graphite, Docker, Vagrant, Datadog, ScalaTest, RabbitMQ, Akka Streams, Mockito, AWS</b>	
<b>CLIENT</b>	<b>CAXIS</b>	<b>Mar 2015 – July 2015</b>
<b>BUSINESS</b>	Working in the OOH advertising space creating a proof of concept for a new platform.	
<b>TECHNOLOGY</b>	<b>Scala, Vaadin/Scaladin, HTML 5, Slick, POI, MariaDB, CSS, Sass, Leaflet, Javascript</b>	
<b>CLIENT</b>	<b>Inkflash</b>	<b>Oct 2014 – Mar 2015</b>
<b>BUSINESS</b>	Working on a 3D book store, sitting on top of Amazon data <a href="http://inkflash.com">http://inkflash.com</a> <a href="https://www.youtube.com/watch?v=Y2rloTfJgAA">https://www.youtube.com/watch?v=Y2rloTfJgAA</a>	
<b>TECHNOLOGY</b>	<b>Scala, Scalatra, Scaladin/Vaadin, HTML 5, ScalaTest, Akka, Neo4j</b> graph database, <b>Play Framework</b>	
<b>CLIENT</b>	<b>HSBC (Via Oracle Consulting)</b>	<b>May 2014 – Oct 2014</b>
<b>BUSINESS</b>	EMIR Delegated Reporting <a href="http://www.hsbcnet.com/gbm/about-us/financial-regulation/emir/delegated-reporting">http://www.hsbcnet.com/gbm/about-us/financial-regulation/emir/delegated-reporting</a> for Data Services Layer (DSL). DSL platform won Best Wholesale Bank for Technology Innovation award at Euromoney Awards for Excellence 2014	
<b>TECHNOLOGY</b>	<b>XSLT, Java 7, Spring, Spring STS, Saxon, Drools, Maven, JUnit, RTC Jazz, jsoup, FpML 5.x, XSD, Elasticsearch, Logstash, Kibana</b>	
<b>CLIENT</b>	<b>Barclays Corporate</b>	<b>Aug 2013 – Jan 2014</b>
<b>BUSINESS</b>	Working on a strategic mobile payment platform: Pingit for corporates <a href="http://www.barclayscorporate.com/products-and-solutions/cash-management/barclays-pingit-for-corporates.html">http://www.barclayscorporate.com/products-and-solutions/cash-management/barclays-pingit-for-corporates.html</a>	
<b>TECHNOLOGY</b>	<b>Java 7, Scala, Spring MVC, REST, Vaadin, Scaladin, Scalatra, Scalate, Akka, Spray, HttpClient, Gatling Stress Tool, ScalaTest, BDD, Git, 2-way SSL, JCE/JSSE, Tomcat 7, Jetty, Maven, WAS</b>	
<b>CLIENT</b>	<b>TSO</b>	<b>Apr 2013 – July 2013</b>
<b>BUSINESS</b>	Working on the Gazettes project to unify the existing Government Gazettes websites into one cohesive whole. Working on the <b>HTML5</b> UI in <b>XSLT 2.0</b> . <b>XSLT</b> Transforms under <b>Marklogic</b> . Also wrote <b>XForms</b> engine. Lots of	

	mentoring and assistance to <b>Java</b> team <a href="https://www.thegazette.co.uk/">https://www.thegazette.co.uk/</a>	
<b>TECHNOLOGY</b>	<b>Java 7, Spring MVC, REST, XPath, Marklogic 6, XQuery 3.0, Saxon, XSLT, Tomcat 7, XForms, HTML 5, RDF/RDFa, SPARQL. SVN, Maven</b>	
<b>CLIENT</b>	<b>Standard Bank</b>	<b>May 2011 – Sep 2012</b>
<b>BUSINESS</b>	<p>Sitting within <b>Architecture</b> and <b>Integration Middleware</b> team I was responsible for various Enterprise Messaging Migration tasks for the real-time <b>Trade Bus</b>.</p> <p>First I had to assist in fixing bugs in the <b>SBML/FpML</b> translations, due to lack of validation, handling upstream cross product messages from <b>Front, Brady 500/600, Murex GTS/EQD/Energy</b> into <b>SBML</b> and then onto downstream subscribers. This ranged from simple code changes and unit tests to more complex discussions as to where to source missing elements, appropriate <b>FpML</b> structures etc. My previous <b>FpML</b> experience at <b>JP Morgan</b> proved very useful.</p> <p>Translated existing <b>Python</b> codebase into Java, for a pure Java solution.</p> <p>Upgraded and improved <b>Hudson/Jenkins</b> continuous integration install as it was running too slowly, which impacted the dev life cycle, made build run in 1/4th of the time.</p> <p>Various production performance issues, e.g. 1 hour process now runs in 20 seconds, removing massive memory leak, fixing race conditions etc.</p> <p>Created end user <b>multithreading Trade Bus</b> API and <b>REST Webservice</b> for <b>Java/C#</b> publishers/subscribers for use with the new <b>Enterprise Bus</b>.</p> <p>Extended <b>test harness</b> to include non <b>Trade Bus</b> subscribers including external process JVMs and languages other than Java, initially for <b>Traiana Harmony</b> and <b>FX Spot/NDF</b> handling.</p> <p>Extensive <b>Data Analysis</b> for schema documentation and data quality.</p> <p>Distributed <b>regression test framework</b> for new <b>Enterprise bus</b>.</p>	
<b>TECHNOLOGY</b>	<b>Java 7, XPath, Hudson/Jenkins CI, Marklogic 6, XQuery 3.0, Saxon, XSLT, Joda Time, Python, Apache Commons, JUnit, log4j, JMX, WebServices, C#, XSOM, XSD, Apache CXF, TestNG, SVN, Esper, Spring Integration, Camel, FpML 4.x</b>	
<b>CLIENT</b>	<b>HSBC Global banking and Markets</b>	<b>Jun 2010 – Sep 2010</b>
<b>BUSINESS</b>	<p>I was responsible for various <b>MI (Management information) Research Dashboard</b> initiatives in the <b>Global Research</b> department. I was tasked with first analysing then migrating various manual/<b>Excel</b> based procedures into an <b>Ajax</b> web UI. Areas included were Readership, Entitlements, Authorisation, Analyst lookup, Broker Votes and Global Tiered Access.</p>	
<b>TECHNOLOGY</b>	<b>Java, Tomcat, WebSphere, SQL Server, Transact-SQL, XSLT, Ajax/jQuery/jqGrid, JavaScript, HTML, Apache POI for reading XLS</b>	
<b>CLIENT</b>	<b>Unicredit Bank</b>	<b>Mar 2010 – May 2010</b>
<b>BUSINESS</b>	<p>I was responsible for various <b>eCommerce STP</b> development tasks in the front office. My first task was to enable STP for <b>Reuters RET FX Spot/Forward</b> Trades coming from the <b>FXO</b> desk, via <b>Quantus/Caplin</b> through the Reuters <b>LBN</b> via <b>MQ</b>, passing it onto <b>Murex</b> in <b>MxML</b> format via <b>MQ</b>, for later posting onto <b>Kondor</b> +. Before I did this trades had to be manually booked. I did this using the in house <b>XStream multithreading</b> low latency messaging server and mapping in <b>XQuery</b> and <b>XSLT</b>. My second task was to convert <b>RET</b> trades to <b>WSS</b> format and send to the Vienna server, keeping track of ack/nacks.</p> <p>My third task was to convert <b>RET Spot/Forward/Swap</b> into a standardised format (<b>ebom</b>- eCommerce Business Object Model) for consumption by 3<sup>rd</sup> party systems like <b>Traiana, Sophis</b>, and <b>Opics</b>. This allowed us to remove commercially sensitive data and only send what we needed, resulting in</p>	

smaller messages, less latency and faster processing.

**TECHNOLOGY** Java 1.5/1.6, Sybase, SQL Server, Saxon XQuery/XSLT, XSD, RET, Murex, Kondor+, IBM Websphere MQ, JNDI/LDAP

**CLIENT** JPMorgan Chase **Aug 2009 – Mar 2010**  
**BUSINESS** <http://www.marklogic.com/solutions/operational-trade-store/>

I was responsible for developing the complex **XQuery** transforms needed to map the existing derivative trade message formats to the new canonical message format necessary for the **ODS** project: **GBOM** (Generic Business Object Model) . The Operational Data Store (**ODS**) is a facility to create, revise, access and manage shared business data in a secure, stable and consistent manner. In time the ODS will become the primary mechanism by which applications access shared transaction data in the firm, i.e. a SRP (Strategic Reengineering Project). **Nominated for the Best Investment Banking Initiative for The Banking Technology Awards 2011.**

Source message formats included **RmSwapTrade, TradeMLConfirmable, TradeMLedgotc, IRMLfxo, IBML fxo/ird/commodoties, FpML** containing **trade, confirmation** and **settlement** messages for **Interest Rate Swaps, Cross currency Swaps, CDS, CDO, Equity Swaps, Caps, Floors, Collars, SwapOptions, FX Options, Equity Options** etc.

My transforms were used in both the backload of existing legacy data, in batch mode, as well as on the live trades going through the **multithreading** message bus.

I also provided consultancy and mentoring on **XQuery/XSLT** related matters to other members of the team and within **IBTech Core Processing**.

**TECHNOLOGY** Java 1.6 and Saxon-EE XQuery/XSLT, XSD 1.0/1.1, Sybase 15 ASE, Marklogic 4.x, XCC, XSOM, Oracle 11g, eXist-DB 1.4, mockito, Scrum, Hudson CI, SVN, FpML

**CLIENT** Reuters/Thomson Reuters **Jan 2008 – Nov 2008**  
**BUSINESS** I was responsible for importing **Thomson** feed data, before and after the merger.

I imported Thomson **ILX, ECF, GEM/SDI, RCM** data from multi gigabyte **XML** files into **Oracle**, in order to be integrated with the **Reuters NDA CORECAT** data. This pulled in organization, instrument, quotation and relationship data, in the case of **SDI, 22GB** of it. Due to the size of the data my solution had to be fast and able to handle the large volumes.

Documented the above, liaised with QA and Ops. Created **Oracle APEX** applications in order to analyze and navigate the huge datasets. Did reviews of other people's Java designs. Also worked **on performance improvements** on existing feeds, code reviews for other teams.

**TECHNOLOGY** Java 1.6 and JAXB 2.x, Spring, Hibernate, XSD, Oracle 10g, EasyMock, Multithreading Reuters Feed Server architecture, used **Apache Derby** (aka **Java DB**) as a local data cache to avoid memory issues, **H2** in memory database to act as in memory cache, **Oracle APEX (HtmIDB), Solaris, KSH, Perl, Python, ExtJS**

**CLIENT** Fitch Ratings PLC / ValuSpread **Oct 2006 – Nov 2007**  
**BUSINESS** I was in the development team for **RAPCD: Risk Analytics** Platform for **Credit Derivatives** for the **synthetic CDO** market.

I wrote the Market Data Report in **XSLT 2.0** with 17 different business rules to show data state and quality, intra-day comparisons and alerts, used before uploading **ValuSpread** and **Markit CDS** market data to the

**Algorithmics** pricing engine.

I also developed various **XSQL/XSLT** pages for the main **RAPCD** web interface, adding pages for the handling of Market Data Batches, overrides and workflow, using **AJAX** technology for better user experience

[http://www.derivativefitch.com/rap\\_cd.cfm](http://www.derivativefitch.com/rap_cd.cfm)

I also added custom **XSQL** action tags for **SOAP WebService** consumption, so that **XSQL** pages could access various external **web services**. Also created **XSQL** actions tags to publish to **JMS**

Created cross server communication framework with **ActiveMQ JMS** to enable various cross server processes to integrate workflow.

Also worked on **Excel XLA** addins to export data to **Excel** as well as conversion of **Deal Snapshot** editor **Swing**.

Prototype of **Flex RIA** framework UI as possible new front end.

Wrote new **SOA** business framework, along **SOA Lite** lines, using **XSL/XQuery** as driving language, using **Saxon8-sa** custom functions.

<http://www.xml.com/pub/a/2007/09/12/extended-xquery-for-soa.html>

This is now the backbone of our new **SOA** architecture.

Wrote **very large** dataset **AJAX** component, e.g. browsing and editing 100,000 rows of data in browser in performant manner.

Helping **ValuSpread** with their new customer portal, using above **SOA** framework, improving **PL/SQL** performance and the user experience

## TECHNOLOGY

**Java 1.5** and **XSLT 2.0** via **Saxon8-sa**, Optimized **XSLT** that took many hours to run so that it now took a couple of minutes.

Made **Prototype AJAX** handling of large (**20MB+**) xml data **9** times faster.

Enabled **gzipping** of XML, leading to **98%+** savings in data transfer

Created Saxon custom function to enable posting of **XML** body to **Web Services**, also enables **gzip** unlike standard **document()** function

**XML REST web services** and web pages via **Oracle XSQL**, **Oracle 10g**, **XSLT/XQuery Javascript**, **JSP**, **AJAX/Prototype/Scriptaculous**, **Spring-WS**, **Excel 2003 XML Maps**, **Excel VBA**, **XSD**, **SOAP**, **ActiveMQ**, **JMS**, **Swing**, **Flex**, **Saxon** custom functions, **FusionCharts**, **Schematron**, **PL/SQL** optimization, **C#**

## CLIENT BUSINESS

**Elsevier Science Ltd**

**March 2006 - Oct 2006**

I was in the development team for their web delivery system, **Phoenix**. **Phoenix** is the platform which delivers hundreds of online scientific journals, with accompanying custom websites, to individuals, societies and companies. My main task was to speed up and improve their **Tiptree** toolset, which was what they used to translate their site definition **XML** to the final delivery content format, also **XML**. Given my experience at **Fish4**, this proved to be an area with which I was very comfortable. I was also tasked with converting **Tiptree** to be compatible to our new **JEE** platform. My next task was to write a standalone test harness for the security module (**A&E**), allowing them to chase down severe performance issues. Next I was tasked with migrating the in house **C++** search and content engine (**Bibliotek**) to **MarkLogic**, a pure **XML XQuery** database, as the current system was slow, unstable, and couldn't take on any more business.

## TECHNOLOGY

Pure **multithreaded** Java, **JDK 1.4.2**, **Spring**, **SAX/XML/XSLT 2.0**, **900+** journals to process, thousands of **XHTML** site fragments. Sped things up enormously, made it possible to select individual journals or clusters of journals for translation after the project lying dormant for over 6 months. The migration to **MarkLogic** of course involved converting the existing 1999 technology to the latest version of the **MarkLogic** pure **XML/XQuery** database, with the client side **COM/Java** code turned into pure **Java**.

