Graham Pople

Scala // Java // Web // C++ Developer

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Senior programmer with over 14 years of experience, including 4 years working on Scala, Java and web development, and 10 years C++.

Please check out my demo site to see my more interesting recent projects.

Competencies

Backend	Core: Scala, Java, C++, SQL
	Some: Spring Boot, C#, C, Fortran, Hibernate, Python
Web	Core: ScalaJS, Javascript, Typescript, HTML, Stylus, CSS, Thymeleaf
	Some: Angular, Grails
Frontend	ScalaFX/JavaFX, GTK
Devtools	ScalaTest, JUnit, IntelliJ, Mercurial, Git, SVN, Linux CLI

Experience

Current
April 2014
4 years

Reskilling in Scala, Java & Web Development

- Since early 2014 I have been taking a career break. Wanting to branch out from C++, I took an opportunity to both travel and find a language that better fit my goals of producing readable and well-tested code, quickly. Plus, to try out some ideas for commercial projects.
- I have used the time productively to learn mainly Scala, Java and web development, plus Spring Boot, Grails, Groovy, Typescript, and multiple other technologies. I've put together a demo site to show the more interesting projects written in this time, please check it out.

Skills: Scala,Java, ScalaFX/JavaFX, SQL (Postgres), HTML, Stylus, CSS, Spring Boot, OpenGL, Javascript, Typescript, Angular, Grails, Groovy, Hibernate

April 2014
August 2010
3.5 years

Senior Software Developer
Bloomberg LP

- Completed major project to rebuild and update the most-run Bloomberg screen. It displays a condensed set of key info about stocks and is run 10+ million times daily. Designed and built a highly optimised low latency C++ backend to handle the load, to replace the previous Fortran system, together with an efficient Javascript UI. Delivered on schedule and with great feedback from clients (including the company director). This was a 2 person project and I was responsible for 80% of it.
- Architected and built a highly performant, highly optimised C++ multithreaded backend on UNIX, to process millions of trades daily from 40 equity exchanges in realtime. Made key architecture decisions early that gave huge wins in performance and time to deployment, particularly the use of skiplists as the central data structure. Also architected and built the complex Javascript UI, which gets run over 25k times daily.
- Project managed a team of 12 and was a lead architect in a major initiative to rebuild and integrate multiple legacy trading systems into a new microservices architecture, involving 10 complex C++ backends handling millions of trades in real-time over a shared bus, plus multiple accompanying UIs in Javascript. Project was ongoing when I left, and was on-schedule and already getting great results and feedback.

- Mentored junior programmers and was a UX Rep, helping other teams with their UIs.

Skills: C++, Javascript, Fortran, Jenkins

August 2010
2003
7 years

Software Engineer & Technical Support
Aculab Plc

- Started in technical support, where we were expected to be capable C++ coders to replicate customer issues. Progressed into the "ApplianX" team as a C++ software engineer.
- Worked on the flagship product "ApplianX", a turnkey Linux-based telecoms product that used a multithreaded C++ & Python engine. This involved a strongly test-driven development and a focus on multi-threading and optimisation.

Skills: C++, Python

Motivations

I hope I can help your team and business as I:

- Am comfortable doing **full-stack development** in a variety of languages, including architecting and building complex multi-threaded backends in both monolithic and microservices styles, and building dynamic UIs.
- Am language-agnostic, always keen to learn and use whatever tools are most appropriate to solve the problem. I have a wide range of experience across a lot of languages and techs.
- Have many times taken a product or feature through the **full software lifecycle**. From clarifying initial client/business requirements, to working out the architecture and risks, working with others to make it a reality including building parts or the whole myself, unit testing and continuous integration, following up with the stakeholders and iterating until everyone's happy.
- Am a lover of **unit testing** and **continuous integration** – but also know when it's appropriate (while adding a feature to a stable product: good, during rapid initial prototyping: not so great).
- Have a sensible, **business-minded approach** to software development. Keep it simple, avoid excessive feature creep, release early (when appropriate), iterate, and stay agile.
- Have a focus on clean, readable code, using a pragmatic mix of OOP and FP.
- Know how to fix the hard stuff. I've plenty of experience optimising with Yourkit, and I've built a classfile analyser and a toy JVM for fun so I know my way around low level JVM details. And, the experience to debug and avoid issues in the real-world.
- Have plenty of server maintenance and devops experience, including database migrations and maintenance, managing JVMs on low-memory platforms, Linux command-line use and scripting.
- Work great both independently and in teams. I've mentored junior colleagues and generally shared tips and tricks with colleagues – while learning from others.

Education

2000-2003 University of Warwick

BSc in Computer Science, 2(i)

1993 - 2000 Helena Romanes School, Essex

A levels - Mathematics A, History A, Physics B

A/S Level - Further Mathematics A, English Language A