

Freelance Java Virtual Machine Expert Software Technical Leader / Researcher / Senior Developer

Objective / Offer

Solve hard challenges, quickly identifying and addressing the real issues. In Montpellier or remotely. Occasional travels possible.

Rare Skills

Very fast learner

Understand very quickly difficult subjects or problems

Creative

Solve problems and brainstorm effectively

Analytical and attentive to details

Safely improve complex software

Expertise

- Java Virtual Machines
- real-time constraints
- multithreading/concurrency
- garbage collectors (real-time or not)
- JIT/AOT compilers
- lot of programming languages
- ...

Languages

- English (fluent), French (native), Spanish (elementary)
- C/C++, assembly programming, Java bytecode, shell scripts, Java, Python, php...

Education

- **Ecole Polytechnique, Engineer, 1985-1988**, most famous "Grande Ecole" in France
- **ENSIMAG, Computer Science Engineer, 1988 -1990**
- **INPG, Computer Science PhD, 1990-1994.**

Experience

Since 2016: Freelance, **Bertrand Delsart Software Solutions**, Montpellier

Advanced software Research, Development and Troubleshooting.
Technological watch. Self study.

2010-2016: Consulting Member of Technical Staff (highest technical grade), **Oracle**

Port HotSpot to ARM/PPC ports, working on the complex parts (G1, InvokeDynamic, ...). **Invent a solution for iOS (1 patent)**. Contribute to ValueType specification and prototyping.

2003-2010: Senior Research Engineer, **Sun Microsystems Research Laboratories**

Technical leader for Real-Time Java (RTSJ on CLDC and JavaSE). Code complex parts (PIP locks, GC extensions...). **Invent and code a fully concurrent real-time garbage collector** (RTGC, 2 patents, pause times lower than 1ms). Help or train customers experimenting with RTSJ on various domains (trading systems, avionics, electric plants, military applications). Talk at international conferences.

1995-2003: Senior Research Engineer, **Open Software Foundation Research Institute**

Started by successfully identified Java as a key future technology to work on when it was **first disclosed by Sun Microsystems**. Act as consultant, project manager and/or research engineer for Java Virtual Machines related projects (JDK ports, embedded variants, **JIT compilers**...). First port of Java to native threads. **Implement from scratch a virtual machine for payment terminal** (team of 2).