

Jakob Odersky | Curriculum Vitae

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Education

- Ecole Polytechnique Fédérale de Lausanne** **Lausanne, Switzerland**
CS Pathway *2013–2015*
Pathway courses for Master studies in computer science.
- Ecole Polytechnique Fédérale de Lausanne** **Lausanne, Switzerland**
Bachelor studies *2010–2015*
Bachelor studies in physics
- Gymnase de Burier** **Burier, Switzerland**
Matura *2007–2010*
Graduation with honorable mention and prizes in mathematics and physics. Including a one-year exchange in Gießen, Germany at Liebig Schule.

Experience

Vocational

- Inpher Inc** **New York, USA and Lausanne, Switzerland**
Senior Software Engineer *Jan 2019–present*
- Co-lead of the team responsible for the research, development and productionisation of a programming language for writing privacy-enhancing algorithms for data analysis, specializing on secure multiparty computation.
 - Implementation of a distributed system for running such algorithms.
 - Developer tooling and operations for productively working on a polyglot codebase shared by teams of multiple different backgrounds.
 - Built various infrastructure tools to fit the scale of the business: single-sign-on service for clients, package repository, documentation system.
 - Contributions to many open source libraries. Notably, porting many projects from Scala 2 to 3.
- Driver Inc** **San Francisco, USA**
Software Engineer *May 2017–Oct 2018*
- Architecture and development of the Scala platform that powers a treatment matching system for cancer patients.
- Data Monsters** **San Francisco, USA**
Advisor *Apr 2017–Jan 2019*
- Advisor for a consulting company, specializing in solutions around big data and machine learning.
- International Business Machines (IBM)** **San Francisco, USA**
Advisory Software Engineer *Oct 2015–May 2017*
- Part of the Spark Technology Center, IBM Watson Data Platform
 - Contributor to Apache Spark and the Scala compiler
 - Committer on the Apache Toree project
- Crossing-Tech SA** **Lausanne, Switzerland**
Contract Developer *2011–2014*
- Development and maintenance of the company's website.
 - Implementation of a custom, version-controlled content management system.

Miscellaneous

Event organizer 2016–present

- Organization, hosting of and speaking at meetups in the Scala community

Building a Drone from Ground-Up 2014–2015

- Engineering a quadrotor.
- Designing a controller circuit board.
- Porting a real-time operating system and flight-stack to a new processor.
- Implementation of virtual cockpit ground-control software.

Hobby Developer 2009–present

- Implementation of a physics engine, as my school's final year project.
- Development of a C and Scala library for low-level communication to actor based systems.
- Creating and managing a custom server on an ARM development board
 - tweaking the Linux kernel
 - Debian packaging
 - various server administrative tasks
- Building of a real-time kernel for embedded AVR systems.
- Implementation of a scientific calculation utility library, with a focus on compiling specialized commands from Scala to Matlab.

Languages

German: fluent, European language level C2 *Mothertongue*

English: fluent, European language level C2 *Cambridge Certificate of Proficiency*

French: fluent, European language level C2 *School and University*

Computer skills

Operating Systems: Advanced knowledge and experience in GNU/Linux, especially Debian.

SysAdmin/Infrastructure/DevOps: Experience managing deployments with Kubernetes and Nomad. Provisioning with Terraform. Various cloud systems, notably Google Cloud. Observability tools: Prometheus, Grafana, Jaeger

Programming Languages: Scala, C, C++, Shell, Java, JavaScript, Python, Matlab, Rust

Libraries and Frameworks: "Singaporean Stack", Akka, Apache Spark, Slick, OpenGL

Web Development: Cask, Akka HTTP, "Play!" framework, ScalaJS, AngularJS, Bootstrap

Source Control: Git, SVN

Office and Design Tools: LaTeX, Inkscape, KiCad, OpenSCAD

Other: In-depth experience with GnuPG

Interests

Tennis: Played a few years in a club, continuing for fun.

Computers and Electronics:

- Developing software and hardware for my needs.
- Open-source software enthusiast.

Dancing: Various dances, ranging from Standard to Salsa.

Brewing: Self-made beer.

Outdoors: Hiking.