Timothée Jourde
Software engineer

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Fond of computer science and autodidact, I hold a master's degree, and a technical degree in computer science. Throughout my experiences as a software developer, a student, and a strong hobbyist, I have acquired skills in algorithmics and data structures, programming and software engineering; but also in data visualization and development of user interfaces.

Work Experience

September to November 2022
Rust   Iced   International   Remote
Software engineer position at Kraken. Front-end work on Cryptowatch Desktop, a native cross-platform trading terminal built with Iced: an in-house open-source Rust GUI toolkit. International English-speaking full-remote team. Laid-off as part of a large-scale reduction in force.
cryptowat.ch/apps/desktop

November 2020 to July 2022
C++   JUCE   MIDI/MPE   Windows   macOS   iPadOS
Software developer position at Joué Music Instruments, manufacturer of an expressive electronic musical instrument. Development of a native cross-platform musical application working with the instrument: mainly user interface and communication with the device through MIDI.
jouemusic.com/en/pages/joue-play-app

April to August 2019
C++   Python   Gurobi   Linear optimization   Bioinformatics
Final year internship at LaBRI, Computational Biology team (master's degree, second year): implementation, evaluation, and enhancement of a genetic sequences analysis program, whose purpose is to identify among known strains of a bacterium, which ones are present in a biological sample and in which quantities. The genetic material of the sample being sequenced with a high-throughput method.
github.com/timjrd/mrsep/tree/master/src/mrsep.ilp

June to July 2018
Haskell   AI
Internship at LaBRI, Formal Methods team (master's degree, first year): design and implementation of a computer player for the Mastermind board game.
github.com/timjrd/mastermind

June to July 2017
Scala   Scala.js   D3.js
Software developer position at ISPED, ERIAS team: continuation of the previous project, in partnership with LaBRI (see below).

March to August 2016
Java   Lucene   GWT   Data mining   Semantic Web
Software developer position at ISPED, ERIAS team: development of an online forums analysis system targeted at spotting medications misuses by the population, with a web visualization application.

April to May 2015
C++   OpenGL   GLSL   Scala   Spark   Big data
Internship at LaBRI, EVADoMe team (technical degree): implementation of a massive data visualization application based on parallel coordinates, with a distributed backend infrastructure. This work has provided the basis for a publication (see below).

Education

2017 to 2019 Computer science master's degree at University of Bordeaux, software engineering specialisation.

2016 to 2017 Computer science bachelor's degree at University of Bordeaux (L3).

2013 to 2015 Computer science technical degree (DUT) at Bordeaux University Institute of Technology (IUT).

2013 High school diploma, mathematics specialisation (BAC S).

Publication

Joris Sansen, Gaëlle Richer, Timothée Jourde, Frédéric Lalanne, David Auber, Romain Bourqui. "Visual Exploration of Large Multidimensional Data Using Parallel Coordinates on Big Data Infrastructure". *Informatics. 12 July 2017.*
www.mdpi.com/2227-9709/4/3/21

Skills

Rust Very interested. Work experience. Good command.
C++ Interested. Work experience. Good command.
Haskell Very interested. Internship experience. Good command.
Java Work experience. Good command.
Scala Very interested. Work experience. Decent command.
C Decent command.
Python Internship experience. Decent command.
JavaScript Basic command.

Linux Interested. Good knowledge and daily usage.
Git Interested. Work experience. Good command.
Nix/NixOS Very interested. Decent command.
CSS/HTML Interested. Good command.
Bash Good command, unfortunately.

Free Software enthusiast, interested by business models involved in open-source. Inquisitive, in-depth computer science knowledge.

Personal Projects

Haskell   AI   Generative music   Sound synthesis
Software producing a musical audio stream that is randomly generated (both melodies and timbres). Done from scratch.
github.com/timjrd/automagicsynth

Haskell   Web scraping   WebExtensions
Metasearch engine for online videos. The results are sorted by quality estimation and duration of the videos. A web-based graphical user interface is available.
github.com/timjrd/scrapeaming

Rust   Simulation
Barnes–Hut N-body simulation on a grid together with a stencil code producing an artistic video. Done from scratch.
github.com/timjrd/stencil-n-body.rs

Languages

French Native language.

English See last work experience (international English-speaking team). Daily reading of technical articles and documentation.

Hobbies & Misc.

Music Drums, percussion, piano.
Alpine skiing Good level.
Cooking Vegetarian dishes.

Went to Gabon, Senegal, Japan, United States, New Caledonia, England, Italy, Spain, Belgium.

Driving licence (permis B), have a car.