Arthur Bricq

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Lausanne, Switzerland

I am a software engineer working in robotics, more specifically in autonomous robot operating in unknown environment. My set of skill covers low-level programming (such as Rust, C++ or Oberon) to high level software design (Java, Python, Javascript) or backend-programming (Java, Python). I am passionate about computer science: from building large software in a team to spending some of my personal time programming personal projects. I am a team player, always eager to learn more and to share my knowledge. You are welcome to visit my personal site to discover more about me. I am currently looking for jobs in Ticino, as I am moving there from Sep. 2024.

EXPERIENCE

- **Software Engineer**
  Bluebotics
  I am part of an agile software team where we work on many different products : a complex fleet manager, a user-interface configuration software, a web-app, and embedded robot code. In this company, I also work on research projects to improve the localization stack of our robots.
  Sep 2022 to Now

- **Junior Software Intern and Master Thesis**
  Flybotix
  I worked as a research intern in a drone company, where I designed the localization software using visual-SLAM algorithm. This worked continued as a master thesis.
  Aug 2021 to Aug 2022

- **Year Abroad in Canada**
  University of British Columbia (UBC) - Vancouver, from 2018 to 2019

- **Mobile App Developer**
  I designed and coded a complex mobile app for a tailoring company, and worked as advisor for several other mobile projects of EPFL's Junior Entreprise (Swift, Java, React-Native)
  2017 to 2020

- **Teaching Assistant at EPFL**
  Physics, Computer Science, Numerical Analysis & Legged Robotics.
  2017 to 2021

- **Year Abroad in Brasil**
  Sao-Paulo State, from 2014 to 2015

EDUCATION

- **M.S. Robotics, GPA: 5.54/6**
  Ecole Polytechnique Federale de Lausanne (EPFL)
  Received the **Excellency Scholarship**
  2021

- **B.S. Mechanical Engineering, GPA: 5.58/6**
  Ecole Polytechnique Federale de Lausanne (EPFL)
  2018

SKILLS

- **High-Level Programming**
  Python (Data-Science with Pandas, Machine Learning, Deep Learning & all purposes), Java (desktop apps, back-end, android apps), Swift (iOS apps), Javascript (React, React-Native, Vue.JS), Matlab (Machine Learning), bash

- **Low-Level Programming & Electronics**
  Rust, C, C++, PCB Design & Manufacturing with Kicad, Microcontroller programming

- **Linux**
  Linux Proficiency, ROS2 (Python), Jetson Nano or with Raspberry Pi Ecosystems

- **Mechanical Engineering**
  Catia, SolidWorks

- **Languages**
  Fluent: French, English; Conversation level: Italian, Portuguese

A FEW PROJECTS

- **Personal projects**
  I always try to have a personal project, for instance I have done 2 chess engines and player, a text editor, a personal-website generator. Currently working a cpu 3D game engine. Checkout my list of personal projects for more information.

- **Robottle** `[Youtube Link]` `[Github Repo]`
  In a team of 3 we designed an autonomous robot able to localize itself & travel to detect and pick plastic bottles in an arena. I was in charge of all the software of the robot. This project was selected by NVidia as a showcase project.

- **Roots, China Hardware Innovation Sensor** `[Github Repo]`
  1.5 year long program, in a team of 5 skilled students (engineering and design), we designed a smart sensor for connected home and had the experience of an academic start-up while being introduced with the Chinese production supply chain.