Silvano Cerza — Software Engineer

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I enjoy working on different platforms and technologies, right now most of my time is spent multi platform desktop applications in Golang, I also dabble with Electron/Node. In the past I used to write desktop and mobile applications with Qt, a C++ framework. I also had the chance to work on some small web applications in Django/Python. Mostly for personal projects I've also used the frontend stack throughout the years. I'm never scared to tackle a new task using unknown languages or technology, it's something that I aim for since I believe it's the best way to learn something new.

Work Experience

Arduino **Jul 2020 – Present**
arduino.cc

I work mainly on the ArduinoCLI, implementing new features, fixing bugs and writing tests.
I also work on other minor supporting projects for the ArduinoCLI like external libraries, GitHub Workflows Actions and similar things.
Most of the times I handle the release process of the ArduinoCLI, from triggering the build process to communicating with marketing for social communications.

Golang | Python | TypeScript

Molecular Horizon **Jun 2019 – Jul 2020**
molhorizon.it

I work on several cheminformatics projects, I focus mainly on GUI development in C++ using the Qt framework, but also had the chance to contribute with the scientific team to the core components of the products.

C++ | Qt | QML | Qt Quick

Evonove **Feb 2015 – May 2019**
evonove.it

I work mainly on web applications in Python based on the Django framework.
I gradually moved to C++ developing multi platform apps using the Qt framework.
On occasion I also train newcomers and interns on Git, Python and C++. I've also had the chance of managing small projects.

Python | Django | C++ | Qt | QML | Qt Quick

Work Projects

Arduino CLI
/arduino/arduino-cli

Arduino CLI is a command line tool written in Go, it's used to manage and install libraries, the tools necessary to compile and upload to different Arduino boards, and several other things.
Among its features it's also the backbone of the new Arduino IDE, using a gRPC interface to communicate with each other.
I plan and implement new features, fix existing bugs, enhance legacy parts and write tests for untested parts of the code.

Golang | Python | gRPC | Protobuf

Arduino IDE 2
/arduino/arduino-ide

Arduino IDE 2 is the new version of the famous Arduino IDE used by millions of makers around the world.
The new version has been rewritten from scratch using Electron and the Theia framework. It uses the Arduino CLI internally to implement most of its features.
I implemented some minor feature, fix existing bugs, and handled integration of new functionalities from the Arduino CLI.

Node | Electron | Theia | Typescript | React

Kibitzer
moldiscovery.com/software/moka/

Kibitzer is a desktop app to train computational models used to predict molecules' pKa values.
I integrated several C and C++ libraries in a multi threaded model to parallelize their execution to speed up the statistical computation for a better user experience.

C | C++ | Qt | QML | Qt Quick

MKM SDK
/evonove/mkm-sdk/

An open source SDK for Magic Card Market, uses reflection to dinamically resolve the API endpoints.

Python | OAuth

Qnite
/evonove/qnite/

An open source library to create charts declaratively in QML.
I contributed by adding several features like charts zoom and bug fixing.

C++ | Qt | QML | Qt Quick

Swing
/moldiscovery/swing/

A CLI tool to handle upload and download of versioned files to AWS S3 buckets.

Golang | AWS

Talks

Monitoring Open Source Success in Arduino Oct 2021
/watch

In this talk, I tell the story of how my team started using Datadog in an unusual way to monitor the success of one of the most important of its Open Source projects, the Arduino CLI, by gathering download information from different sources and monitoring build failures. I also explore some of the next steps we can take to gain insight into our other projects.

Personal Projects

Yellow Rats
/silvanocerza/yellow-rats/

A simple GUI written in C++ using OpenCV and ZBar, to scan and catalog comics by number and quality.

C++ | OpenCV | ZBar | CMake

Cute Code Accessor
/silvanocerza/CuteCodeAccess

Cute Code Accessor is a plugin for Unreal Engine that enables the use of Qt Creator as its IDE.

C++ | Unreal Engine

Bank Reader
/silvanocerza/bank-reader

A scraper for my personal bank account, used to monitor how I spend my money.

Python | Django | Scrapy | Lua | Vue.js

Datadog Agent
/DataDog/datadog-agent

Datadog Agent is an open source monitoring tool.
I contributed to Six, a C++ wrapper around the CPython API supporting multiple versions of Python that can be used by other languages like Go.

C++ | C | CPython | Go

Spectrum
/silvanocerza/spectrum

An highly customizable Hugo theme based on the CSS framework Bulma.

Sass | CSS | Bulma | Hugo

This resume
/silvanocerza/resume

This resume has been completely written in HTML and Scss. Uses a small Dart script and dart-sass to compile and minimize Scss sources.

HTML | Dart | Sass | CSS