

#### Aljaž Frančič, PhD

### Computer Programmer Born March 1, 1993

# Work experience

Present

†
Jan 2024

Software Engineer

openDAQ d.o.o.

Open-source Data Acquisition SDK
by Dewesoft & HBK

- Computer programming (C++, Python, Bash)
- Data Acquisition
- Signal Processing

Sep 2022 ↑ Oct 2018 Young Researcher, Teaching Assistant

System Software Laboratory
Faculty of Electrical Engineering and Computer Science
University of Maribor

- Biomedical signal processing with focus on electromyography (MATLAB, R, LaTeX)
- Machine learning (Python, NumPy, Matplotlib, TensorFlow, Keras)
- Computer vision (Python, NumPy, OpenCV)
- Bibliography (COBISS)

### **Education**

2023 ↑ 2012 University of Maribor

Faculty of Electrical Engineering and Computer Science

- 2023: PhD, Computer Science and Informatics Software pipeline for computationally efficient and robust estimation of motor unit firing times from high density surface electromyograms
- 2018: Master's degree, Computer Science and Information Technologies Robot control with a neural network and a muscle-machine interface
- 2015: Erasmus+ student exchange at Tampere University, Finland
- 2015: Bachelor's degree, Computer Science and Information Technologies (UN)

Automatic mouth detection from digital images by using active models

2012 ↑ 2008 II. gimnazija Maribor

The National Grammar School Programme

• Zois scholarship recepient

## **Projects**

myo-readings-dataset

Myo armband electromyographic readings dataset for various wrist gestures (Python, NumPy, Matplotlib, TensorFlow, Keras)

stonks-bot

Discord bot that pulls the prices for user-defined coins from CoinGecko for a user-defined number of last days and displays them in a plot in a relative manner (Python, NumPy, Matplotlib, Discord API, AWS)

8d-audio-homebrew

Jupyter notebook that converts a regular wav file into an 8d audio wav file (Python, NumPy, Matplotlib)

sudoku-solver

Computer vision solution that finds a sudoku puzzle in a photo, extracts the puzzle grid, recognizes the numbers in the grid, finds the solution to the puzzle and projects it onto the original photo (Python, OpenCV)



#### **Contact**

 $\sim$ 

Email

aljaz.francic@gmail.com

Phone

+386 51 410 170

Address

Ješenca 6d 2327 Rače Slovenia

Links

github.com/aljazfrancic linkedin.com/in/aljazfrancic/



- C/C++
- Python
- C#
- Java
- MATLAB
- LaTeX
- R.
- Git
- Bash
- Regex
- JavaScript
- HTML
- CSS
- MySQL
- AWS
- Heroku
- Myo
- Oculus
- Kinect
- Adobe Photoshop
- Microsoft Office

## Α×

#### Languages

- English (fluent)
- Slovenian (native)



#### Hobbies

Walking, jogging, swimming, Magic the Gathering (trading card game)



Other

Easy-going, creative, I've been programming since 2009