



Aljaž Francič, 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 recipient



Projects

- **myo-readings-dataset**
Myo armband electromyographic readings dataset for various wrist gestures
- **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

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[GitHub](#)
[LinkedIn](#)



Skills

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



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