Aljaž Frančič, PhD

Computer Programmer

Born March 1, 1993

Work experience

2022 ↑ 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
  Doctoral dissertation: 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
  Thesis: 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)
  Thesis: Automatic mouth detection from digital images by using active models

2012 ↑ 2008

II. gimnazija Maribor

The National Grammar School Programme

- Zois scholarship recepient

Projects

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)

Guide2Music

Android mobile application – interactive musical landmarks guide to Slovenian musical attractions using augmented reality (C#, Unity)

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)

BIKE-DRIVE

Research and development of an electric bike

Contact

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Slovenia

Links
GitHub
LinkedIn

Skills

- C/C++
- Python
- C#
- Java
- MATLAB
- R
- LaTeX
- 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), Old School RuneScape (videogame)

Other

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