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
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2008

II. gimnazija Maribor
The National Grammar School Programme

- Zois scholarship recepient

🎯 Projects highlights

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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2327 Rače
Slovenia

🌐 **Links**
GitHub
LinkedIn

⚡ Skills

- Python
- C#
- C/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