Aljaž Frančič

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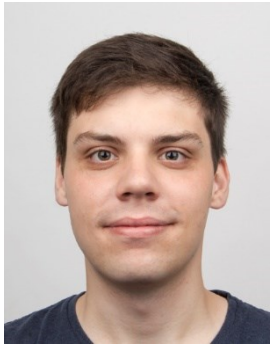
Curriculum Vitae

Born March 1, 1993



https://github.com/aljazfrancic
https://www.linkedin.com/in/aljaz-francic/

Education

- Primary school Rače
- II. gimnazija Maribor, The National Grammar School Programme
- University of Maribor, Faculty of Electrical Engineering and Computer Science
  - 2015: Bachelor's degree, Computer Science and Information Technologies (UN)
    - Thesis: Automatic mouth detection from digital images by using active models
  - 2015: Erasmus+ student exchange at Tampere University, Finland
  - 2018: Master's degree, Computer Science and Information Technologies
    - Thesis: Robot control with a neural network and a muscle-machine interface
  - 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

Experience

- 2018-2022: 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)

Project 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 a solution to the puzzle and projects it onto the original photo (Python, OpenCV)
- BIKE-DRIVE: Research and development of an electric bike

Proficiencies

Python (NumPy, Matplotlib, Tensorflow, Keras, OpenCV, Discord API), C# (WPF, Unity), C/C++, Java, MATLAB, R, LaTeX, Git, Bash, Regex, JavaScript, HTML, CSS, MySQL, Heroku, AWS, Myo, Oculus, Kinect, Adobe Photoshop, Microsoft Office

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 2010