

# Aljaž Francič

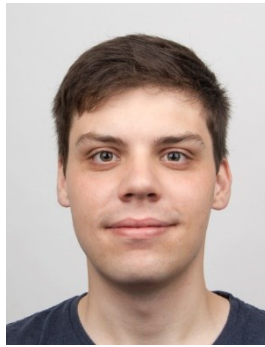
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## Curriculum Vitae

Born March 1, 1993



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 <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 the 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