

## PERSONAL INFORMATION

## Ožbolt Menegatti

 Goriška cesta 39, 5282 Cerkno, Slovenia

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 [www.ozbo.lt](http://www.ozbo.lt)

Gender Male | Nationality Slovenian



## WORK EXPERIENCE

## September 2022 – IT support

Glasbena šola Idrija & Glasbena šola Tolmin, Slovenia

– Full IT support for music schools

## October 2019 – September 2022 Software development

Abrantix d.o.o.

Sermin 71, 6000 Koper (Slovenia)

- Extensive knowledge of EMV, EP2 and in-house Gklp and Personalization payment protocols;
- Development and Maintenance of POS terminal software for Worldline;
- Transition from in-house TFS solutions to Azure DevOps based system using git repositories and pipelines for continuous testing and integration,
- Adapting legacy C codebase for Android platform using JNA as communication layer,
- Development of secure TA applications based on Trustonic, Qualcomm and Knox security environments,
- Development of Azure devops based pipelines for testing and CD purposes,
- Development of static code analysis tools based on llvm libraries,
- Extensive use of gradle build system.

## July 2020 Consultant

Trgo-mokk d.o.o.

Godovič 7, 5275 Godovič (Slovenia)

- Moving excel programs for product selection to web technologies,
- Dynamic editing of svg images,
- Usage of CDN for hosting pages inside a Wordpress platform.

## October 2018 – February 2020 Software development and maintenance

Center za jezikovne vire in tehnologije

University of Ljubljana, Slovenia

- Helped in development of cloud dictionary creating and editing tool [Lexonomy.eu](http://Lexonomy.eu).
- Developing tools for manipulating large amounts of data in XML TEI and CoNLL-U formats.
- Server administration.
- Porting and fixing of Windows applications for Linux.
- Development of XML editing interfaces for development of dictionaries used by Slovene language experts.

## December 2018 Multimedia center for music school

Glasbena šola Idrija

Prelovčeva 9, 5280 Idrija, Slovenia

- Developed an application for viewing PDF slide shows, playing of music and live concert viewing on TV screen.
- Management using HTTP web server based on Flask library.
- Hardware designed around Raspberry Pi platform.
- Live streaming of video and audio using FFmpeg and VLC.

## August 2015 – September 2018 Software Engineer

Guardiaris d.o.o.

Podjunska ulica 13, 1000 Ljubljana (Slovenia)

- Maintenance and improvement of legacy C++/Qt3 air traffic radar view system Albatross for Slovenian's air traffic control (KZPS).
- Development of camera pose estimation system based on OpenCV and RaspberryPy.
- Work on human skeleton detection system using convolutional neural networks.
- Developed other support tools, such as an embedded neural network library, camera calibration application and C++ ASN1c wrapper.
- Assistance with the switch of version control systems from subversion to git.

## February 2012 – January 2013 Teaching instructor

Go-tel d.o.o.

Jadranska 27, 2000 Maribor (Slovenia)

Teaching instructor for high school and university students. Teaching mostly programming languages and other computer knowledge, but also electrical engineering, mathematics and physics.

## EDUCATION AND TRAINING

### 2010 – 2013 Bachelor of Science in Electrical Engineering Science

Faculty of Computer and Information Science, University of Ljubljana, Slovenia

not finished, completed all but two exams with an average grade of 9.6/10

### 2012 – 2014 Bachelor of Science in Computer Science

Faculty of Computer and Information Science, University of Ljubljana, Slovenia

finished with an average grade of 8.9/10

### 2015 – 2018 Master of Science in Computer Science

Faculty of Computer and Information Science, University of Ljubljana, Slovenia

not finished, completed 100 % of exams with an average grade of 9.0/10

## PERSONAL SKILLS

Mother tongue Slovenian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user  
[Common European Framework of Reference \(CEF\) level](http://europa.eu/cefr/)

- Communication skills and competences**
- team work: I have successfully worked in a team of programmers, electrical and mechanical engineers to deliver a finished product;
  - teaching skills: I work with colleagues and students as an instructor and a mentor;
  - freelance programming: a self employed programmer from October 2018 to October 2019
- Programming skills**
- dynamic languages: Python3, Bash, javascript, also have experience in working with Lua and Octave/Matlab.
  - static languages: C, C++, Java, also have experience in working with C# and Rust;
  - other domain specific languages: VHDL, SQL, Xpath, XSLT, XSD;
  - Implementation of security protocols on GlobalPlatform - no stdlib C, X509 certificates (rfc 5280), Signed/EncryptedData messages (rfc 5652) and similar;
  - Java/C interface development using JNA interface on Android;
  - web development in python both on backed (Flask) and front end (transcrypt compiler);
  - computer vision library OpenCV, use of image processing, camera calibration and 3D reconstruction, pose estimation and marker recognition;
  - machine learning using sklearn for different clustering, regression and classification algorithms and Pytorch for deep learning;
  - STM32 arm embedded devices running FreeRTOS;
  - Qt, PyQt, Fltk and Html/CSS for graphical interfaces;
  - GNU, LLVM, Gradle and Cargo build toolchains;
  - Cython, Pypy and Pybind11 for Python performance improvements;
- Open source contributions**
- [asn1c github.com/vlm/asn1c](https://github.com/vlm/asn1c) - better C++ compatibility
  - [rustc github.com/rustc-lang/rust](https://github.com/rustc-lang/rust) - improved documentation in the beta days
  - [owl github.com/ianh/owl](https://github.com/ianh/owl) - improved ansi C compatibility
  - [duplo github.com/dliddstrom/Duplo](https://github.com/dliddstrom/Duplo) - added new commandline argument for performance improvements
- Other Technical skills**
- attended a Cryptography 1 class on [coursera.org](https://www.coursera.org),
  - extensive experience with Linux OS,
  - networking setup with multiple connections to the internet using [openmptcprouter.com](https://openmptcprouter.com),
  - completed multiple projects using RaspberryPy computing platform,
  - git and Mercurial version control systems,
  - integration of Gdb server debugger tool on embedded platforms into VisualStudio IDE,
  - development of Azure DevOps pipelines,
  - KiCAD electronics design software,
  - httrack automated website duplication,
  - knowledge and implementation of WCAG accessible websites,
  - Gimp (image editing), Kdenlive (video editing) and FFmpeg/VLC (video and audio capture, conversion, streaming), yEd/drawIO graphs
- Other skills** Enjoy all sports particularly running, bicycling, swimming, football and basketball. My hobbies also include a guitar and a chess board.
- Driving licence** AM, B1, B, G