# **PROJECTS**

## **Dino Lozina**

Born 8 January 1986, Split, Croatia

Nationality Croatian

## **IT Skills**

Programming languages • C#

Python

Tools • Git

GithubGitlabPostmanFiddlerJIRAAxosoft

Visual Studio

Visual Studio Code

Frameworks • .NET 5

BlazorASP.NETWPF.NET MLCamunda

Data bases • MySQL

PostgreSQL

Others • jQuery

jQueryOpenCVHalcon

## **Engeneering Skills**

 Robot programming (ABB, FANUC, KUKA, Mitsubishi)
 PLC programming (Siemens, Mitsubishi, Schneider)
 HMI programming
 Camera interface programming **Programming** 

Tools TIA Portal

Robot Studio RT ToolBox 2GX Works2Basler Pylon 6

Other

Image processingImage manipulation Machine learning

#### 12/2020 - today

#### Podravka, Koprivnica, Croatia

Specification, development, debugging, user support

C#, ASP.NET, WPF, jQuery, SQL

- Automation of payment order processes
- Developing email service that gathers relevant data
- Developing UI settings for consultant and testing teams
- Frontend development in .NET framework (WPF)

#### 04/2020 - 12/2020

## Financial Agency (Fina), Zagreb, Croatia

Specification, development, debugging, user support

C#, ASP.NET, jQuery,SQL, various OCR engines (Nicomsoft, Abbyy, Tesseract), machine learning (.NET ML), OpenCV, Camunda

- Automation of payment order processes
- Developing selfhost API
- Using machine learning to classify types of documents
- Using machine vision to classify types of documents
- Using OCR (Optical character recognition) to gather data from documents
- Using machine learning to correct wrong data points
- Frontend development (HTML, CSS, jQuery)

#### 10/2019 - 04/2020

## Vienna Insurance Group, Zagreb, Croatia

Development, user support, debugging, testing

C#, ASP.NET, jQuery, SQL, machine learning (.NET ML), OpenCV, Camunda

- Development of mobile application that automates insurance purchase
- Development of server-side services
- Using machine learning to classify types of documents
- Developing UI settings for consultant and testing teams
- Frontend development (HTML, CSS, jQuery)

## 10/2019 - today

## University of Split, Split, Croatia

Conception, specification, development, implementation

Python, machine learning, machine vision, Open CV

- Solving robot pick and place tasks with machine vision
- Migration from .NET to Python and OpenCV
- Using open-source ML libraries
- Preparing documentation for lectures

## 10/2018 - 10/2019 University of Split, Split, Croatia

Conception, development, validation

C#, machine learning, machine vision, Halcon, robot programing

- Solving robot pick and place tasks with machine vision
- Conception of a machine vision software
- Using machine learning for object recognition
- Programing advanced robot functions
- Frontend development in .NET framework (WPF)
- Preparing documentation for lectures

## 01/2019 - 09/2019 Unior, Zreče, Slovenia

Team lead, product owner, conception, development, validation, commissioning

C#, WPF, SQL, machine vision, Halcon

- Development of an application for measurement of production workpieces (Pincers)
- Conception of a machine vision software
- Saving and managing data (SQL)
- Frontend development in .NET framework (WPF)
- Team management of 3 people

## 04/2018 - 01/2019 Omco, Hum na Sutli, Croatia

Team lead, product owner, conception, development, validation, commissioning

C#, WPF, SQL, machine learning, machine vision, Halcon

- Development of an application for measurement of production workpieces (Bottle molds)
- Conception of a software for control of measurement machine
- Gathering data from third-party machines
- Saving and managing data (SQL)
- Development of algorithm for production workpieces correction
- Frontend development in .NET framework (WPF)
- Team management of 3 people

## 08/2017 - 04/2018 Omco, Hum na Sutli, Croatia

Team lead, product owner conception, prototype development, validation, commissioning

C#, WPF, SQL, machine learning, machine vision, Halcon

- Developing prototype application for robot pick and place applications
- Developing machine vision software
- Using machine learning for object recognition
- Frontend development in .NET framework (WPF)
- Saving and managing data (SQL)
- Team management of 3 people

## **Engineering Projects**

#### 10/2016 - 6/2017

#### Walmart, Mebane, North Carolina, USA

Team lead, development, validation, commissioning

Robot Programming, machine vision programming, PLC programming

- Development of warehouse automation solutions
- Developing software for robots
- Setting up robot vision systems
- Team management of 5 10 people

#### 01/2016 - 10/2016

## Coca-Cola, Oceanside, California, USA

Development, validation, commissioning

PLC programming, Robot programming, commissioning

- Development of warehouse automation solutions
- Ensuring that the different protocols (security, I/O validation, etc.)
  has been performed
- Making sure that the industrial network is functional
- Controlling and ensuring the quality of installation and the final adjustments

#### 01/2014 - 12/2015

## Seaonics, Alesund, Norway

Conception, development, validation, commissioning

PLC programming, HMI programming, electrical drawings design

- Conception of a software for control of Electric Double Mooring Winch 100kN
- Conception of electrical drawings
- Setting up machine radio control
- Testing equipment on site

## 03/2013 - 01/2014

## AdriaWinch, Split, Croatia

Conception, prototype development, validation, testing, commissioning

PLC programming, HMI programming, electrical drawings design

- Conception of a software for control of Electric Towing Winch 40kN
- Conception of electrical drawings
- Implementing safety features based on force measurement
- Developing software for HMI (Human machine interface)
- Testing safety features of equipment

## 03/2012 - 03/2013

## AdriaWinch, Split, Croatia

Conception, prototype development, validation, testing, commissioning

PLC programming, HMI programming, electrical drawings design,

- Conception of a software for control of Anchor-mooring winch 66K3
- Developing software for automatic anchor mooring
- Developing software for HMI (Human machine interface)
- Testing safety features of equipment

## 03/2011 - 06/2011

# LASMEA (Laboratoire des Sciences et Materiaux pur L'Electronique et D'Automatique), Clermon - Ferrand, France

Master thesis research

## **FEKO**

- Research for master thesis
- Collaboration between French colleges and home institution (FESB)
- Published paper on subject (Transmission Line Theory approach used on Typical Power Line Communication Structures)