

# **OZREN VUCICEVIC**

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ozren-vucicevic

O ozrenv

#### IT SKILLS

Microsoft Office package

Python

Git

MATLAB

Latex

Django

### **DATA SKILLS**

Data processing

**Pandas** 

Numpy

Matplotlib

Sci-Py

#### Machine/Deep Learning

SciKit-Learn

Keras

TensorFlow

**Anomaly Detection** 

Predictive Maintenance

#### Signal processing

Time-Series Data Analysis

Motion tracking

Xsens MVN Awinda

Laban Movement Analysis

## **ENGINEERING**

#### Robotics

**Universal Robots** 

OpenCV (blob detection)

Sensory data collection

System integration

TCP/Modbus protocols

### **ABOUT ME**

With a passion for leveraging technology to drive innovation and efficiency, at Aalborg University I have dedicated much of my studies to exploring data analysis and machine/deep learning applications.

Throughout my academic career, I have worked on a variety of projects in collaboration with different companies including VELUX and Arla, that have honed my analytical and problem-solving skills. I have gained valuable experience in project management, team collaboration, and data-driven decision-making in combination with the academic aspect of writing scientific papers and projects.

In my recent projects, I focused on developing machine and deep learning pipelines for various applications in manufacturing. I handled tasks from data collection to model implementation, and delved into time-series data analysis. Using Python and different data analysis tools, I gained practical experience in fundamental machine learning concepts. Through these projects, I discovered my passion for AI and am now seeking a job where I can continue working in this field.

Collaborating with skilled colleagues has shown me the importance of teamwork, setting clear milestones and working towards achieving them. Having a career in a flexible and productive environment and constant development of my professional skills plays a big part of my life and I am seeking a role in a company that aligns with these values and supports my growth.

### **EDUCATION**

Master of Science (MSc) in Mechanical Engineering - Manufacturing Technology | Aalborg University

**2**021. - 06 2023.

Aalborg, Denmark

Bachelor of Science (BSc) in Mechanical Engineering | Faculty of Mechanical Engineering Slavonski Brod

**=** 2021.

Croatia

### **EXPERIENCE**

Student Internship | HPC BIJUK d.o.o

**i** 08 2020 - 11 2020

Samobor, Croatia

- · production of high-pressure couplings
- making programs for CNC machines (AutoCAD)
- making programs for machining centers (SolidWorks)

Facility maintenance | ASURA Group

**1** 06 2019 - 07 2020

Zagreb, Croatia

AMR/AGV implementation

#### Simulation

Discrete event simulation

**Enterprise dynamics** 

RoboDK

**CAMWorks** 

Ansys (FEM)

#### **Process automation**

Process line analysis

OEE

Sensor implementation

### **LANGUAGES**

Lang 1: Croatian

Lang 2: English

Lang 3: German - basics

Lang 3: Danish - beginner

### **HOBBIES**

Handball

Music production

Hiking

Cooking

### **REFERENCES**



Chen Li (Assistant Professor) tilf: 5264 5576 mail: cl@mp.aau.dk

- managing technical documentation of electrical and engineering systems with the purpose of facility management
- cost analysis and experience in sales

#### **PROJECTS**

Time-Series Anomaly Detection for Industrial Screwing Task with Machine Learning Algorithms (Master) | Aalborg University, VELUX

**1** 02 2023 - 06 2023

- Aalborg, Denmark
- system integration and simultaneous data collection (UR10 robot, PLC, Screwdriver Controller, sensors, microphone)
- creation of a diverse dataset (sensory data, robot data, audio data)
- dataset preparation and analysis
- anomaly detection ML/DL models

Real-Time Trust Assessment of Safe Human-Robot Collaboration | HORIZON2020 DrapeBot project

**1** 09 2022 - 01 2023

Aalborg, Denmark

- EU DrapeBot project
- trust dynamics in close proximity human-robot collaboration
- · motion tracking with MVN Awinda
- · data collection and processing
- · signal processing and visualisation
- ML/DL pipeline and models

### **EXTRACURRICULAR ACTIVITIES**

Board of European Students of Technology | BEST Zagreb

**2018 - 2020** 

Zagreb, Croatia

AAU Case Competition 2023, Participant Telenor

**=** 2023

Aalborg, Denmark