**Last updated:** July 6<sup>th</sup>, 2021 **Full name:** Matevž Borjan Zorec

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Motto: Practice Flexible Mind

1) Date and place of Birth: Jan 4th 1995, Ljubljana, Slovenia

2) Citizenship: Slovenian

3) Education:

## 1. Elementary level

Place of Study: Osnovna šola Vrhovci

Year of study: 2001 - 2009

Extra Curricular: athletic competitions, choire, hiking club, astronomy club, scouts association, model making club, rock climbers club, music school - guitar & piano lessons

## 2. Secondary level

Place of Study: **Gimnazija Jožeta Plečnika Ljubljana (GJPL)** Field of Study: Gimnazija/Secondary school, natural science focus

Year of study: 2009 - 2013

Extra Curricular: athletic competitions, english reading badge, german reading badge, astronomy club, scouts association

Key Achievements:

Award for Student Study of contaminants in Ljubljana's drinking water

Award for Student Study of photovoltaics and their applications in Ljubljana

Place of Study: Konservatorij za glasbo in balet Ljubljana (KGBL)

Field of Study: Piano, Bassoon and Solfeggio

Year of study: 2005 - 2013

Extra Curricular: Youth Wind Orchestra

Performances: 100, live audience & recitals, public performances

Place of Study: Srednja šola za Farmacijo, Kozmetiko in Zdravstvo (SŠFKZ)

Field of Study: Dental Technician Programme for Adults

Year of study: 2015 - 2017

Apprenticeship: Health Centre Ljubljana, Vič-Rudnik division, Denture Lab. June - July, 2017



### 3. Tertiary Level

Place of Study: University of Ljubljana (Uni-Lj)
Department: Faculty of Electrical Engineering

Field of Study: Electrical Engineering

Year of study: 2013 - 2021

Societies: Preboj, EESTEC, Zavod 404, BEST, IEEE Student Society, UGRC, FIRST Global Slovenia, Robolab DIR Staff

## Extra Curricular Project work:

National Biology Institute 2014 Bioinformatics analysis of biological data

Slovenian Forestry Institute 2015 EUFORGEN: assisted with Biomonitoring of Forestry Genetic Data

ITIS, Centre for Implantable Technology and Sensors d.o.o. 2017 Vagus nerve IR stimulus response measurement

Faculty of Electrical Engineering, Uni-Lj & Zavod 404 2016 - 2018 Microtransat

Zavod 404 2017 - 2018 FIRST Global, Team Slovenia

UGRC 2019 Roboduino

UGRC 2020 - 2021 SEN STEM Robotics Programme

Faculty of Electrical Engineering, Robolab, Uni-Lj 2019 - 2020 Days of Industrial Robotics

Faculty of Public Administration, Uni-Lj 2020 ŠIPK Smart Waste Management

# 4) Principal Fields of Interest:

Robotics, Automation, Space Systems Engineering, Prosthetics & Biomodding, Extended Reality, Affective Computing, Online Education.

## 5) Work Experience:

Position: Maintenance Officer

Organisation: Celica Biomedical Ilc

Date: August 2011 - May 2021

Job Description: Janitorial duties, sanitation, basic workplace maintenance

Skills: Self-motivation, organizational, attention to detail, communication, time management, honesty, versatility, discretion, consistency, attentiveness, autonomous working, adequate friendliness, problem solving, inventory management, equipment maintenance.



Position: Temporary Assistant Lab Technician Organisation: Slovenian Forestry Institute

Date: May 2015

Job Description: Assistance in preparation of samples for forestry genetic monitoring

Skills: organizational, teamwork, attention to detail.

Position: Chef's Assistant Organisation: Super Ilc Date: Apr - May 2017

Job Description: Dishwasher & catering assistant.

Skills: manual handling & dexterity, knowledge of food handling, sanitation.

Position: Carpenter's Assistant

Organisation: 4MK Marjan Kovač s.p.

Date: Oct - Nov 2016

Job Description: Joinery, carpentry work, finalising fit & finish, material preparation and handling of domestic furniture.

Skills: woodworking, material handling, joinery, manual dexterity, self motivation, attention to detail.

Position: Inventory Assistant

Organisation(s): Rudnidis ltd, Takko Fashion ltd

Date: Dec 2016 - Jan 2017

Job Description: assisted in shop inventory for E-Leclerc Ljubljana and Takko Fashion store Ljubljana.

Skills: organizational, manual dexterity.

Position: Event Assistant

Organisation(s): Hotel Palace Portoroz llc

Date: Mar 2016 - Jul 2017

Job Description: assistance in preparation of hotel premises for various events and activities.

Skills: physical work, manual dexterity, communication, teamwork, attention to detail.

Position: Mentor & Manager

Organisation(s): Zavod 404, FIRST

Date: Feb 2017 - Oct 2018

Job Description: Organized, managed, mentored all aspects of Team Slovenia at the FIRST Global Robotics Challenge

Skills: team management, leadership, organizational skills, strategic analysis, rapid prototyping, teaching & communication skills, design assessment, quality control, marketing & marketing research, outreaching, contract planning, travel planning, international correspondence, public speaking, public relations, design assessment, teambuilding, team planning, networking.



Position: Mentor and Foreign Advisor

Organisation(s): University of Guyana Robotics Club (UGRC)

Date: 2018 - 2021

Job Description: Assisted in organizing & managing various events:

Roboduino: 1 week workshop teaching Arduino basics to kids 7 - 15 years old, incl. Capstone

SEN: STEM Robotics Programme for Special Needs Schools (UGRC & GCOPD collaboration) Sr. mentor & curriculum designer. Special Educational Needs Research Programme in collaboration with the University of Guyana Robotics club (UGRC) and the Guyana Council

for Persons with Disabilities (GCOPD).

Project proposals: 3D printing, Equipment Inventory, Room Setup

Skills: inventory management, teambuilding, asset management, networking, maintenance, quality assurance & control, legal work, team management and planning, meeting hosting & planning, student tutoring & mentorship, social media coordination, social media marketing, marketing management, strategy design, constitution drafting, event planning & management, project management, curriculum development, teaching skills, web content management, web conferencing, finance management.

Position: Event organizer & Staff for Days of Industrial Robotics

Organisation(s): Laboratory of Robotics, Faculty of Electrical Engineering, University of Ljubljana

Date: Oct 2019 - Jun 2020

Job Description: Event planning, event management, coordinating teams of students, planning presentations and competitions.

Skills: event management, planning and coordination.

Position: Event assistant

Organisation(s): Faculty of Electrical Engineering, University of Ljubljana

Date: Feb - Feb 2020

Job Description: event assistant at Open Career Day.

Skills: organizational, public speaking, event coordination.

### **Contract Project Work Experience:**

Title of project: Using bioinformatics for analysis of biological data

Organization(s): National Institute of Biology, Genialis llc

Description: project participation within framework of national program: "a creative path to practical knowhow". I helped organize, query, collect and sample a database and then prepared a parsing program to sift through collected information to derive a new database of every documented cave dwelling organism ever recorded.

Start, end date: Mar 2014 - Jan 2015

Key skills: Problem solving, advanced organizational skills, Python (biopython, cython, iPython), JavaScript, HTML5, database parsing, NCBI database querying, software development, independent research, teamwork.

#### linkedin.com/in/matevz-zorec/



Title of project: Microtransat Slovenia

Organization: Zavod 404 llc, University of Ljubljana

Description: a comprehensive analysis of meteorological data and best path navigation plot interpolation with shipping routes in the North Atlantic, using Google Earth Engine API, Python and JavaScript, with access to NOAA weather data. Resulting precise optimal travel route definition confirmed in US Naval Academy publication. Additional assistance in vessel design, manufacturing and results publication at public events. Project website (deprecated): Microtransat Challenge; Crossing the Atlantic with an autonomous sailboat

Start, end date: Apr 2016 - Oct 2018

Key skills: organizational, teamwork, self motivation, independent research, leadership, communication, Python, Google Earth Engine API, Javascript, NOAA weather database querying, naval navigation, path plotting, planning skills, argumentation skills.

Title of project: Smart Waste Management

Organization: Faculty of Public Administration, University of Ljubljana

Description: Project within national framework: "Student projects for Social Benefit". Pioneering research & development of a waste bin level sensor, using LoRa communications and server side operations. Project summary (Slovenian) Smart Waste Management 2018 - 2020

Start, end date: Feb 2020 - Jun 2020

Key skills: self motivation, research, teamwork, team building, arduino programming, brainstorming, organizational, empathy mapping, business modeling, market research, product development, product testing, responsibility, attentiveness, attention to detail, campaigning, surveying, social media marketing, server management, website management, mobile app quality control & testing.

### Additional Training, Competitions et al:

Training: Dental Technician Apprenticeship / Hands on Training

Organization: Healthcare Centre Ljubljana, Vič-Rudnik unit denture laboratory

Date: June - July 2017

Description: Practical training in operational denture lab, assisting in processing and preparing dentures for patients.

Skills: manual dexterity, patience, attention to detail, self motivation, material handling, sanitation, customer service, wax sculpting.

Training: Modelcraft

Organization: Municipal Association of Societies for Technical Culture, Ljubljana

Date: 2004 - 2006

Description: working on model projects, built a balsa wood glider and a remote controlled sailboat Skills: manual dexterity, attention to detail, patience, self motivation, material handling, critical thinking.

Course: Guitar, piano and basic music theory

Organization: Muzikaviva

Date: 2002 - 2005

Description: guided, entry level course in guitar and piano studies with introduction to basic music theory Skills: manual dexterity, music theory, entry level guitar and piano, listening, basic music composition.

Competition: Drone Challenge 2020

Organization: Faculty of Electrical Engineering, University of Ljubljana; Laboratory for Automatics

Date: March - June 2020

Description: competition for autonomous DJI Ryze Tello Drone flight: obstacle course category Skills: self motivation, research, responsibility. Python programming, linux mint terminal, opency.

Course: Winter Mountaineering

Organization: Alpine Society Matrix of Ljubljana

Date: Feb 2011

Description: Winter mountaineering course for demanding snowy tours including avalanche rescue drill, safe climbing practices, high alpine survival

training and cliff scaling.

Skills: stress management, patience, self motivation, survival.



Course: High School Research Project Course Organization: Gimnazija Jožeta Plečnika

Date: 2010 - 2012

Description: Research project work, subjects: physics, biology. Titled: "Photovoltaic future in Ljubljana", "Analysis of the presence of pollutants in

Ljubljana's drinking water". Received recognition from the Association for Technical Culture of Slovenia. Skills: self motivation, research, microsoft office, public speaking, teamwork, communication, networking.

Competition(s): German Reading Badge, Proteus Challenge, Math Kangaroo, Chess Challenge, Geography Challenge, Windsurf Regatta etc

Organization(s): Gimnazija Jožeta Plečnika Ljubljana, Osnovna Šola Vrhovci

Date: 2004 - 2013

Description: active participation in various activities and competitions - climbing, language skills, biology competitions, cross country skiing challenges, orienteering, archery, slalom skiing, trek cycling, marathon, windsurfing, geography challenge, chess competition, mathematics challenge.

Skills: self motivation, self learning, patience, time management.

Course: Cisco CCNA: maintenance of small home and business networks

Organization: IT Society, Gimnazija Jožeta Plečnika Ljubljana

Date: Feb 2009

Description: Cisco CCNA course: maintenance of small home and business networks

Skills: CCNA certified, self motivation, self learning, time management.

Organization: Scouts Association of Slovenia

Date: 2005 - Apr 2014

Description: member of the Scouts Assoc. Of Slovenia, Order of the Marsh Tulips. Participant in National Orienteering Competition - Žaboboj Ljubljana. Co-Organizer of night orienteering competitions. Organizer of a local campaign assisting elders at Žale municipal graveyard, charity project (Nov 2013). Skills: teamwork, event planning, physical labour, sports activities, time management, team management, event animation, manual dexterity, orienteering.

Organization: Youth Wind Orchestra KGBL

Date: 2008 - May 2013

Description: played bassoon in the woodwind band of KGBL with regular public appearances.

Skills: teamwork, bassoon, patience, time management, self organized.

Certification: IELTS

Organization: British Council Ljubljana

Date: Feb 2015

Description: average score 7.5

Course: German for Business

Organization: Ljubljana Language Academy

Date: Dec 2016 - Feb 2017

Description: course in German language, a tailor-made program for businesses. B1 Rated: CEFR

License: drivers license, cat B

Organization: Government of the Republic of Slovenia

Date: Apr 2016 - Mar 2018

Description: drivers license, category B

Course: Certified Solidworks Associate

Organization: Zavod 404 Date: Apr - Jun 2015

Description: completed course for Solidworks Associate.

Course: Certified LabView Associate Developer

Organization: Preboj Student Society

Date: Mar - Apr 2016

Description: completed course for LabView Assoc. Developer (CLAD)

Course: SMD component soldering

Organization: Radiation and Optics Laboratory, Faculty of Electrical Engineering, Uni-Li

Date: Apr - May 2017

Description: course in specialized SMD component soldering and PCB development techniques, hosted by prof. Matjaž Vidmar.

Hackathon: Dragonhack 2017

Organization: Computer Society Ljubljana

Date: May 2017

Description: participated and presented "Smart Workshop" prototype



Hackathon: Dragonhack 2019

Organization: Computer Society Ljubljana

Date: Nov 2019

Description: participated and presented "personal massage device" prototype

Hackathon: BEST Hackathon 2019

Organization: Student Society BEST Ljubljana

Date: Dec 2019

Description: participated and presented "Radiation Blockchain" prototype

Competition: RoboChallenge 2019

Organization: Days of Industrial Robotics 2019

Date: May 2019

Description: challenge in learning and using ABB RobotStudio to plot and virtually demonstrate various industrial robot assembly line tasks

Event: Roboduino 2019

Organization: University of Guyana Robotics Club (UGRC)

Date: Aug 2019

Description: planned and hosted the first Arduino workshop for young students in Guyana.

Skills: self motivation, teamwork, communication, event planning, event management, team management, time management, attention to detail, customer

service, teaching, curriculum development.

Competition: Guyana National Accreditation Council Essay Competition

Organization: Guyana National Accreditation Council

Date: Apr 2019

Description: "Given the demand for 21[st] century skills, how should educators of post-secondary and tertiary institutions prepare their students for a

diverse, global workplace?", tackled QOL issues Skills: self motivation, research, responsibility.

Training: Global Entrepreneurship Exchange Programme

Organization: University of Massachusetts Lowell, USA (GE2, UMASS Lowell, USA)

Date: July 2019

Description: intense course in business arts

Skills: self motivation, self learning, teamwork, business model development, business analytics, pitching, public speaking, networking.

Competition: *OpenSeventeen Challenge (O17)*Organization: Citizen Cyberlab, Geneva, Switzerland

Date: Oct - Nov 2020

Description: O17 Challenge on Tackling Plastic Pollution; selected among hundreds of applicants globally to tackle plastic pollution issues.

Skills: research, public speaking, self learning, teamwork.

Competition: Global Entrepreneurship Exchange 2020 online business pitch competition

Organization GE2, UMASS Lowell, USA

Date: Mar - May 2020

Description: part of winning team pitch in technology category for the 2020 GE2 online competition in business pitches: technology category, "A 3D

printing business", focusing on printing architectural models for the visually impaired in guyana

Skills: public speaking, research, video production, pitch writing, teamwork, self motivation, business model planning.

Course: Space Mission Design

Organization: Technical University of Berlin

Date: Aug 2020

Description: Space Mission Design entry level course, an intense 2 week workshop with an international team of students brainstorming ideas as part of capstone project: "LEOPARD" a low earth orbit debris removal satellite concept. Worked on Payload concept: using mini solar sails, coupled with webs to

capture and deorbit debris clutters in LEO.

Skills: self motivation, research, teamwork, rapid problem solving.

### 6) Consulting Record:

Celica Biomedical llc 2009 - 2021 Market Discovery, Logistics, Process Optimizations

4MK Marjan Kovač s.p 2014 - 2015 Logistics

Zavod 404 2015 - 2018 Strategy, Logistics, Quality Assurance



## 7) Awards & Honours received:

Award for Student Study of contaminants in Ljubljana's drinking water Award for Student Study of photovoltaics and their applications in Ljubljana

# 8) Current & Previous Organization Memberships:

University of Guyana Robotics Club (U	JGRC) 2018 - 2021	Foreign Advisor
Scouts Association of Slovenia	2005 - Apr 2014	Event Organizer
FIRST Global, Team Slovenia	Feb 2017 - Oct 2018	Team Manager & Mentor
Preboj Students Association	2015 - 2016	Member
Youth Woodwind Orchestra KGBL	2008 - May 2013	1st Bassoon
Mun. Assoc. of Soc. for Tech. Culture	2004 - 2006	Member
Pirat Sailing Club	2007 - 2010	Member
Kayak Canoe Club Tacen	2011 - 2012	Member

# 9) **Teaching Experience:**

Udemy	2020 - 2021	Slovenian For Exchange Students, online	Slovenian
UGRC	2020	SEN STEM Robotics Programme, online	STEM Basics
UGRC	2019	Roboduino	Arduino, Prototyping
Zavod 404	2016 - 2017	Public Training Workshops	3D printing & CAD
Zavod 404	2016 - 2018	Public School Workshops	Prototyping, STEM Basics
Zavod 404	2017 - 2018	FIRST Global Team Slovenia	Robotics, Prototyping

# 10) **Publications:**

Udemy 2020 Slovenian For Exchange Students Online Slovenian L	Udemv	2020 Slovenian	For Exchange Students	Online Slovenian Lar	nguage Course
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Link: <u>udemy.com/course/slovenian-for-exchange-students/</u>