



# Luka Zavrtanik

## Curriculum vitae

### Work experience

- 2022–Present **System test engineer**, *Hella Saturnus*, Ljubljana.  
Validation testing management - budgeting, planning and coordination of tests and equipment
- 2020–2022 **Test engineer PCBA**, *Hella Saturnus*, Ljubljana.  
Validation testing of electronic components and assemblies as a segment in development of lamps for automotive industry
- 2018–2020 **Concept design engineer**, *Hella Saturnus*, Ljubljana.  
Concept development and 3D-modelling of lamps for automotive industry
- 2017–2018 **Internship**, *Smart Wins Technologies gmbh.*, Berlin.  
My task was to design and build a test rig for the company's main product - a sensor, that detects a leak in household plumbing
- 2015–2017 **Design and development**, *BSH Household Appliances*, Ljubljana.  
My task was to design, build and test a prototype, which later became the subject of my Master's thesis
- 2009–2017 **Various part-time jobs**.  
During high school and college, I worked various jobs in the Engineering field, such as tool shop, electronics production line, designing and manufacturing prototypes, etc.

### Technical skills

- Tools Working experience with basic hand tools, hand-operated machines (lathe, milling machine), abrasive water jet machining and 3D printing
- Electronics Basic knowledge of electronics principles and components, experience with inspecting, assembling and testing PCBs
- Programming Basic knowledge in C, Arduino, Python and Excel VBA
- Computer knowledge Working experience with Microsoft Office programs and general computer knowledge
- 3D modelling Working experience with SolidWorks and Catia, experience with concept design

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## Education

- 2015–2018 **Master of science**, *Faculty of Mechanical Engineering*, University of Ljubljana, Mechatronics and laser technology.
- 2011–2015 **Bachelor of science**, *Faculty of Mechanical Engineering*, University of Ljubljana, Mechanical engineering.
- 2006–2011 **Matura (baccalaureate equivalent)**, *Splošna gimnazija*, Nova Gorica, High school education.

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## Master's thesis

- Year 2018
- Title *Design and making of an extrusion based biscuit forming machine*
- Description In cooperation with BSH Household Appliances, we designed a device that would improve the task of making homemade biscuits. The end product was a prototype, that operated using extrusion and sped up the otherwise slow process.

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## Undergraduate thesis

- Year 2015
- Title *Usage of 3D scanning for path correction at contour cutting procedures*
- Description The goal of the thesis was to improve the process of cutting holes into cast-iron side sections of industrial tanks. Because of the nature of the manufacturing process, the actual dimensions deviated from the nominal values. This issue initially caused distorted shapes of the holes, and it was solved using 3D scanning.

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## Languages

- Slovene C2 - First language
- English C1 - Advanced
- German B2 - Upper-intermediate
- Italian B1 - Intermediate
- Other Basic knowledge of Croatian, Spanish and Russian languages