

Silvia Zisu

• silvia.zisu@unitbv.ro



LANGUAGES

- Romanian – Native Speaker;
- English – Fluent Speaker.

EXPERIENCE

ELECTROPRECIZIA ELECTRICAL MOTORS

Aug 2020 – Feb 2025

MECHANICAL DESIGN ENGINEER

- Design and development of technical documents and computer-aided drawings for the assigned perimeter: engagement in the design phases, execution of 3D numerations in SOLIDWORKS, verification of technical papers, revision of technical drawings following production requests;
- Finding constructive solutions for parts, assemblies, and sub-assemblies;
- Development and drafting of specific technical documentation;
- Definition of product materials;
- Visualizing BOMs in SAP;
- Coordination of a research team, responsible for developing new products;
- Contact person for clients in development projects.

SKILLS DEVELOPED WITHIN THE WORKPLACE

- CAD Skills: **CATIA V5 – Sketcher, Part Design, Generative Shape Design, 2D Drafting; SOLIDWORKS - Part Modeling, Assembly Modeling, 2D drafting.**
- Microsoft Office.

EDUCATION

Transylvania University of Brasov | PhD Student – Mechanical Engineering

Oct 2022 – Present

- Studies regarding 3D reconstruction methods and deformation of flexible bodies

McMaster University, Hamilton, Ontario, Canada | Erasmus+ Trainee Student

Feb 2025 – May 2025

- Research internship in the simulation and analysis of the mechanical behavior of flexible materials, with applications in 3D reconstruction and real-time deformations

Transylvania University of Brasov | Master's degree

Oct 2020 – Jul 2022

Virtual Engineering in Automotive Design

- Master's degree final project - Study and parameterized design of wheel rims for vehicles
- A design for car rims was developed using the SOLIDWORKS software, and the parameterized optimization of the number of bolts and their diameter was applied using ANSYS software
- Grade: 10

Boğaziçi University, Istanbul, Turkey | Erasmus+ Trainee Student

Jul 2020 – Sept 2020

- Traineeship at the Computational Imaging Laboratory of the Institute of Biomedical Engineering

Transylvania University of Brasov | Bachelor's degree – Biomedical Engineering

Oct 2016 – Jul 2020

- Bachelor's degree final project - Study and design of an adapted rod for humerus fractures
- The humeral rod was designed using CATIA V5 software and evaluated using finite element analysis (FEA), while biocompatible materials were considered
- Grade: 9.60

„Andrei Șaguna” National College, Brasov | Highschool

Sep 2012 – Jun 2016

- Natural Sciences Profile

SOFT SKILLS

Communication | Teamwork | Problem solving | Leadership | Attention to Detail | Time Management

HARD SKILLS

Product design | Engineering Analysis | Research | Computer skills

PUBLICATIONS

1. **Zisu, S.** (2025). Comparative Analysis of 3D Scanning Methods for Object Reconstruction: Applications and Insights. In: Chiru, A., Covaciu, D. (eds) CONAT 2024 International Congress of Automotive and Transport Engineering. CONAT 2024. Proceedings in Automotive Engineering. Springer, Cham. https://doi.org/10.1007/978-3-031-77627-4_25
2. Nasulea, D., Filip, A. C., **Zisu, S.**, & Oancea, G. (2023). Research Regarding the Dimensional Precision of Electrical Steel Strips Machined by Waterjet Cutting in Multilayer Packages. *Processes*, 11(9), 2788. <https://doi.org/10.3390/pr11092788>
3. Adrian MIJA, **Silvia ZISU** (2023). General Consideration on Electrical Motors Laminations Manufacturing Process. *Academic Journal of Manufacturing Engineering*, 21(2).