



Gabriela Alexandra Rus

- Oluj-Napoca, str. Calea Turzii, Nr 91, România
- **Solution** Gabriela.Rus@mep.utcluj.ro

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Date of birth: 19/01/1996

WORK EXPERIENCE

[14/10/2019 - 15/07/2021] **Marketing Consultant**

PBC ROMB INVEST

Adress: România, Bistrita

The main activities and responsibilities:

Promotion of services, market consultation, offering and presentation of products.

[01/11/2021 – Present] Reaserch Assistent

Technical University of Cluj-Napoca

Adress: România, Cluj-Napoca

The main activities and responsibilities:

- -Consulting current research materials (articles, books)
- Researching the methods of developing the robots used in uniport surgery.
- The research of different configurations for parallel robots and their optimization for their use in uniport surgery.
- -Implementation of artificial intelligence in uniport surgery.
- -Implementation of augmented reality in different stages of uniport surgery.
- Dissemination of the results obtained by writing scientific articles.

EDUCATION AND TRAINING

[01/10/2021 – present] **Doctor in Mechanical Systems Engineering**

Technical University of Cluj-Napoca- Industrial Engineering and Management

Adress: Bd. Muncii, 103-105, 400641, CLUJ-NAPOCA

 $[\ 01/10/2019-15/07/2021\]\ \textbf{Master in Engineering Sciences Applied in Medicine}$

Technical University of Cluj-Napoca - Electrical Engineering

Adress: Strada George Barițiu 26, 400394, CLUJ-NAPOCA

$[\ 01/10/2015-15/07/2019\]\ \ \textbf{Electrical engineer-medical engineer}$

Technical University of Cluj-Napoca – Electrical Engineering

Adress: Str. Albert Berger nr. 4, Bistrita, România

LANGUAGE SKILLS

Mother tongue(s): Romanian Other language(s): Engleză

LISTENING B1 READING B2 WRITING B1 CONVERSATION B2

DIGITAL SKILLS

Good use of communication programs (mail messenger skype) | Microsoft Word | Matlab | Knowledge of 3D design (Solidworks, Solid Edge, NX) | AutoCAD | Matlab Simulink | MultiSim | Intermediate knowledge of C, Python. | MS Project | Arduino IDE - intermediate level

COMUNICATION SKILLS

Good communication skills acquired through professional experience.

VOLUNTEERING

[01/08/2017 – 14/07/2019] Volunteer - Fundația Inocenții Bistrița

PROJECTS

[01/11/2021 - present] **AAL**

Research assistant for the creation of a platform dedicated to mentoring by people close to/or at retirement age.

[01/10/2022 - present] **Challenge**

Research assistant for the creation a novel robotic system with dexterous instruments for assisted single port surgery.

PUBLICATION

[2022]

Application oriented modelling and simulation of an innovative parallel robot for single incision laparoscopic surgery

Pisla, D., Gherman, B., Tucan, P., Birlescu, I., Pusca, A., **Rus, G.**, Pisla, A., Vaida, C., Application oriented modelling and simulation of an innovative parallel robot for single incision laparoscopic surgery, Proceedings of the ASME 2022 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference IDETC/CIE2022 August 14-17, St. Louis, Missouri, 2022.

Workspace analysis of two innovative parallel robots for single incision laparoscopic surgery

Pusca, A, **Rus**, **G.**, Birlescu, I, Vaida, C, Pisla, A., Schonstein, C., Gherman, B, Tucan, P., Pisla, D, Workspace analysis of two innovative parallel robots for single incision laparoscopic surgery, ACTA TECHNICA NAPOCENSIS - Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING

U-net Network Optimization For 3D Reconstruction in Robotic SILS Pre-Planning Phase

Pisla, D., Andras, I., **Rus**, G., Moldovan C., Crisan N., Antal T., Vaida, C, U-net Network Optimization For 3D Reconstruction in Robotic SILS Pre-Planning Phase.

An experimental evaluation of the performance and key factors of intelligent recommendation system

G.Rus, M. Deriaz, C.Vaida, L. Nae, B. Gherman, E. Oprea, A. Pisla, L. Stulens and D. Pisla, An experimental evaluation of the performance and key factors of intelligent recommendation system, Mechanisms and Machine Science, Springer

[2022] An Innovative Recommendation System for a Knowledge Transfer Matchmaking Platform

G.Rus, L. Nae, B. Gherman, C.Vaida, M. Deriaz, E. Oprea, D. Pisla, An Innovative Recommendation System for a Knowledge Transfer Matchmaking Platform

[2021]

A new approach to forward kinematics for a SILS robotic orientationplatform based on perturbation theory

Birlescu, I.; Vaida, C.; Pusca, A.; Rus, G.; Pisla, D.; A new approach to forward kinematics for a SILS robotic orientation platform based on perturbation theory, 18th InternationalSymposium on Advances in Robot Kinematics, 26-30 June 2022 Bilbao, Spain, in press 2022.