


PERSONAL INFORMATION

Alin Dorin Burz



 Fantanele, 63-65, 7, 3, 244, 400320 Cluj-Napoca (Romania)

 0752348263

 alin.burz@mep.utcluj.ro

Sex Male | Date of birth 30/01/1994 | Nationality Romanian

WORK EXPERIENCE

03/05/2018–Present

Technical University of Cluj Napoca
Research Assistant

04/07/2016–30/09/2016

Operator
Robert Bosch, Cluj (Romania)

22/05/2016–24/05/2016

PLC programming and assembly
Let's know mechatronics, Craiova (Romania)
I participated together with some colleagues, with a pneumatic platform in a contest called "Let's know mechatronics" organized by SMC within the Faculty of Automatics from Craiova, the platform that we had to assemble and program.

01/07/2015–22/07/2015

Practice within the quality department
Emerson, Cluj (Romania) Updating the caliber database
Receiving inspection
Performing measurements on CMM and Smart Scope

01/10/2013–17/02/2014

Industrial practice within the "TECHNICAL UNIVERSITY OF CLUJ-NAPOCA"
Cluj (Romania)

EDUCATION AND TRAINING

01/10/2019 - present

PhD Studies in Mechatronics and Robotics
Study program: Robotics (in English)
Technical University of Cluj-Napoca, Romania

01/10/2017–21/07/2019

Master's degree
Technical University of Cluj-Napoca, (Romania)
Robotstudio, Catia V5, Labview

01/10/2013–21/07/2017

Engineer degree
Technical University of Cluj Napoca, Faculty of Machine Building, specialization: Robotics, Cluj (Romania)
General skills:-Computer Aided Graphics, Programming, Technical Drawing,

Electronics, Systems Theory and Automation, Electrical Engineering, Tolerances and Dimensional Control, Machine Parts, Industrial Software, Manufacturing Technologies, Sensors and Data Acquisition, Mechanics.

15/09/2009–15/06/2013 **High school diploma**

"Tiberiu Popoviciu" High School of Informatics, Cluj (Romania)

General skills:

- computer science, mathematics, physics, chemistry.

PERSONAL SKILLS

Mother tongue(s) Romanian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B1	B1	B1	B1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills

- Good communication, socialization, and organization skills.
 - Open with people, understanding, ability to work in a team, acquired because of various projects carried out in high school

Organisational / managerial skills

Self-confidence and teammates, mastery of current situations, punctuality, seriousness, creativity, full dedication, decency, able to coordinate various projects and open to accept ideas, proposals beneficial to both them and the company.

Job-related skills

Development of teamwork. Communication skills.
 Self-confidence in making decisions.
 Technical elements (TPMs, elimination of errors that may occur in cars).

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Experienced user	Experienced user	Independent user	Independent user	Independent user

Digital skills - Self-assessment grid

Microsoft Office: Word, Excel, Power Point.
 Programming: C++, structure text, Rapid, C#.
 Mechanical Design: AutoCAD, SolidWorks, Catia, Robot studio.

Driving license

B, BE

ADDITIONAL INFORMATION

Scientific Publications

1. Tucan, P.; Vaida, C.; Ulinici, I.; Banica, A.; **Burz, A.**; Pop, N.; Birlescu, I.; Gherman, B.; Plitea, N.; Antal, T.; Carbone, G.; Pislă, D. Optimization of the ASPIRE Spherical Parallel Rehabilitation Robot Based on Its Clinical Evaluation. *Int. J. Environ. Res. Public Health* 2021, 18, 3281. <https://doi.org/10.3390/ijerph18063281>
2. Major, Z.Z.; Vaida, C.; Major, K.A.; Tucan, P.; Simori, G.; Banica, A.; Brusturean, E.; **Burz, A.**; Craciunas, R.; Ulinici, I.; Carbone, G.; Gherman, B.; Birlescu, I.; Pislă, D. The Impact of Robotic Rehabilitation on the Motor System in Neurological Diseases. A Multimodal Neurophysiological Approach. *Int. J. Environ. Res. Public Health* 2020, 17, 6557. <https://doi.org/10.3390/ijerph17186557>
3. C. Vaida, N. Plitea, N. Al Hajjar, **A. Burz**, F. Graur, B. Gherman, D. Pislă: : A new robotic system for minimally invasive treatment of liver tumours, Proceedings of the Romanian Academy, series A, Mathematics, Physics, technical Sciences, Information Science 2020, accepted, ISSN: 2045-2322, IF 2017/2018.
4. **A. Burz**, E. Mois, B. Gherman, I. Ulinici, C. Radu, C. Vaida, N. Al Hajjar, A. Bănică, D. Pislă: Development of a control system for an innovative parallel robot used in minimally invasive treatment of hepatic tumors, s. CARE 2020, 30 October 2020, Craiova, Romania
5. PISLA, D., BIRLESCU, I., Emil, M., TUCAN, P., Corina, R., **Alin, B.**, AL-HAJJAR, N. (2021). Simulation and control of an innovative medical parallel robot used for hcc treatment procedure. ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING, 64(1-S2).

Projects

New frontiers in robotic assisted single port surgery: a novel robotic system with dexterous instruments
Call name: P 4 PN-III-P4-ID-PCE-2020-0572 2021 – 2023

A seniors digital platform for knowledge transfer towards industrial companies
Call name: P 3 - SP 3.5 AAL-CP-AAL-2020-7-83-CP-WisdomOfAge 2021 – 2023

An innovative modular robotic system for the rehabilitation of brachial monoparesis
Call name: P 2 - SP 2.1 PN-III-P2-2.1-PED-2019-3022 2020 - 2022

Innovative robotic guided instruments for the treatment of malignant tumors
Call name: P 2 - SP 2.1 PN-III-P2-2.1-PED-2019-4375 2020 – 2022

ROBOTIC-ASSISTED SAFETY CABINET FOR COLLECTING SPECIMENS CONTAMINATED WITH AIRBORNE PATHOGENS, SAFE
Call name: P 2 - SP 2.1 PN-III-P2-2.1-PTE-2019-0160 2020 – 2022

High accuracy innovative approach for the robotic assisted intraoperative treatment of hepatic tumors based on imagistic-molecular diagnosis
Call name: P 1 - SP 1.2 PN-III-P1-1.2-PCCDI-2017-0221 2018 – 2021

An innovative robotic system for upper limb rehabilitation
Call name: EIT Health InnoStars RIS 2019 Innovation Call 2019 - 2019

- Patents**
1. Birlescu, I., Vaida, C., Gherman, B., **Burz, A.**, Tucan, P., Plitea, N., Pislă, D., Automated medical instrument for the manipulation of a laparoscopic ultrasound probe, A00752/15.11.2019
 2. Gherman, B., Birlescu, I., **Burz, A.**, Pislă, D.: Automated medical instrument for the insertion of brachytherapy needles on parallel trajectories, A00806/28.11.2019

Cluj-Napoca, 06/01/2023

PhD. Student Eng. Alin Dorin Burz

