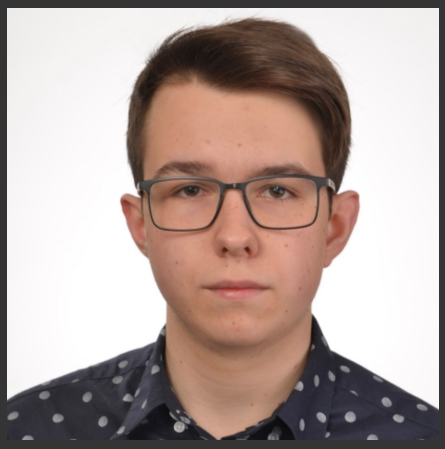
Piotr Patek

Student of Control Engineering and Robotics at Warsaw University of Technology



Personal Info

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Phone
797476170

GitHub
https://github.com/VisteK528

LinkedIn
https://www.linkedin.com/in/piotr-patek/

Skills

Python

C/C++

MATLAB/Simulink

STM32 microcontrollers

ROS2 framework

PCB design

Driving license cat. B

Robot simulation in Gazebo environment

3D modeling in Solidworks

Languages

English - B2

I am a third-year student of Control Engineering and Robotics at the Faculty of Electronics and Information Technology of the Warsaw University of Technology. I am skilled at combining theoretical knowledge with practical applications. My main interests lie in cyber-physical systems, particularly those related to robotics, control, and sound processing.

I stand out for my diligence, precision, and willingness for continuous self-improvement.

Work History

2023-07 - 2023-08

Student Intern

CRW Telesystem-Mesko, Lubiczów / k. Warszawy

Some of the tasks I've completed during my intership are:

- Designing of simple PCB with STM32 in Altium Designer
- Simulation of analog circuits with LT Spice
- Implementation of inverse and forward kinematics in MATLAB / Simulink
- Implementation of some numerical algorithms in C

2022-10 - present

Secretary of the Student Research Club

Student Robotics Research Club Bionik, Warszawa

Since 2023 I am leading the team of students developing 6 legged walking robot at Student Robotics Research Club Bionik. Among the tasks I completed while working on the project were:

- Designing a control board based on an STM32 microcontroller in Altium Designer
- Designing the robot's body using SolidWorks
- Creating a simulation of the robot system in the Webots environment using the ROS2 framework

Education

2022-10 - present

Control engineering and robotics, Bachelor of Engineering

Warsaw University of Technology, Warsaw

GPA: 4.48

During my studies I completed the courses related to:

- Design of control systems (PID, DMC, GPC)
- Modeling of dynamic and static systems
- Simulation and control of robotcs using ROS2 framework
- Machine learning and neural networks
- Digital signal processing algorithms
- Computer networks
- Numerical algorithms

Awards

2023-03

Cassini Hackathon 2023 - 1st place - Team Pathfinder

As a team, we developed a prototype system aimed at making field operations as safe and seamless as possible by utilizing artificial intelligence algorithms and processing data obtained from the Copernicus service.

Certificates

Cambridge English B2 First (FCE) – Score 175