

Jakub Filipek

Curriculum Vitae

+48 533 700 133
✉ jakubfilipek314@gmail.com
🎧 Logosphere Podcast

Education

- 2019–Present **Interfaculty Individual Studies in Mathematical and Natural Sciences**, *The University of Warsaw*, master degree programs in Theoretical Physics (Studies in English) and Mathematics.
Scientific advisors: Dr. Rafał R. Suszek, Prof. Calin Iuliu Lazaroiu, Prof. Marcin Chałupnik
- 2020–2023 **Bachelor diploma in Mathematics**, *The University of Warsaw*, ended with A grade.
Bachelor thesis: "Alternative proofs of Gödel's Second Incompleteness Theorem" under supervision of Prof. Leszek Kołodziejczyk
- 2019–2022 **Bachelor diploma in Physics (individual program for scientifically driven students)**, *The University of Warsaw*, ended with A grade.
Bachelor thesis: "Infinite-dimensional Lie algebras" under supervision of Prof. Krzysztof Meissner
- 2016–2019 **Secondary education**, *XIV High School of Stanisław Staszic*, Warsaw.
Polish equivalent of AP level in Mathematics, Computer Science and Physics

Experience

- 2023–Present **Active participation in the Student Society for Mathematical Structures in Physics at the University of Warsaw, as well as the Trans-Carpathian Student Society, president of the former since October 2024.**
- 2023–Present **Leading Logosphere Podcast.**
The podcast is devoted to scientific and philosophical discourse
- 2022–Present **Online Academic Tutoring Worldwide.**
Teaching in multiple fields of Physics and Mathematics such as: Calculus, Real and Complex Analysis, Linear Algebra, Abstract Algebra, Differential Equations, Probability Theory, Statistics, Relativity Theory, Quantum Mechanics, Quantum Information Theory, Classical Mechanics, Thermodynamics and more. Working mostly with American and British students
- 2021–2022 **Writing a book on Mathematics.**
With primary focus to present XX-century point of view on foundations of Mathematics, in approachable manner
- 2018–2022 **Tutoring Mathematics and Physics to primary school, high school and first year University students.**
Developed communication skills while teaching people with different backgrounds. Worked with gifted individuals, who sought opportunities to be challenged with harder problems, as well as with students who had to gain the courage to tackle complex problems

- 2016–2019 **Programming in C++ and studying algorithmics.**
Preparing for National IT Olympiad
- 2018 **Took part in a summer camp preparing for National Physics Olympiad.**
- 2015–2017 **Developing autonomous UAV - electronics and programming project.**
Gained skills in C language programming, AVR and STM microcontrollers and basic control theory
- 2013–2016 **Working as a member of school sound system service.**
Participating in organising public events for 300+ people

Achievements and awards

- 2019 **Rector's scholarship**
- 2019 **Finalist title in National Physics Olympiad**
- 2019 **Laureate and triple finalist title in Warsaw University of Technology Physics competition**
- 2016 **Awarded The President of The City of Warsaw Prize for academic performance**
- 2016 **Laureate title in Junior English Language Olympiad**
- 2016 **2nd prize in „Tongue Twister” English Competition**
- 2016 **Finalist title in Junior Polish Language and Literature Olympiad**
- 2016 **1st prize in local Mechatronics competition**

Computer skills

- Intermediate C language, Excel, Wolfram Mathematica
- Advanced C++ language, Matlab/Octave, \LaTeX , Tikz

Languages

- Polish **Mothertongue**
- English **Fluent** *passed CAE exam in 2016*
- Spanish **Intermediate** *6 years of school education*
- French **Communicative**

Interests

Scientific

- Algebraic Topology
- Differential Geometry
- Differential Topology
- Mathematical Logic
- Abstract Algebra
- Quantum Mechanics
- General Relativity
- Category Theory
- Foundations of Mathematics
- Field Theory – Physics

Other

- Philosophy
- Public speaking

- Languages
- Plaing Piano

- Psychology
- Powerlifting