

# **Niklas Schwabauer**

**Date of birth:** 27/11/2006 | **Place of birth:** Singen (Hohentwiel), Germany

Nationality: German | Email address: niklasschwabauer@gmail.com

#### EDUCATION AND TRAINING

09/2017 - 07/2025 Singen (Hohentwiel), Germany

ALLGEMEINE HOCHSCHULREIFE (GERMAN GENERAL HIGHER EDUCATION ENTRANCE QUALIFICATION)
Hegau-Gymnasium Singen (Hohentwiel) (General secondary school with upper level)

- Main subjects (advanced level): Mathematics, Physics, Geography

Website <a href="https://hegau-gymnasium.edupage.org/">https://hegau-gymnasium.edupage.org/</a> | Field of study Generic programmes and qualifications | Final grade 1,0 |

Level in EQF EQF level 4 | Type of credits Points according to German Abitur system, maximum 900 | Number of credits 853

09/2013 - 07/2017 Singen (Hohentwiel), Germany

**PRIMARY EDUCATION** Grundschule Friedingen

Website https://www.gs-friedingen.de/ | Level in EQF EQF level 1

### NETWORKS AND MEMBERSHIPS

06/07/2025 - CURRENT Germany

Member of the German Physical Society (DPG)

Member of the largest national physics society, with access to academic lectures, publications, and a professional scientific network.

09/10/2024 - CURRENT Baden-Württemberg, Germany

Member of the Junge Union Germany (JU)

Active member of the youth organization of the CDU/CSU, focused on political, educational, and technological topics relevant to young people in Germany.

09/2023 - 07/2025 Hegau-Gymnasium Singen, Germany

Member of the School Chess Club

Active member and frequent top performer in the school's chess club. Achieved second place in several internal championships and was among the strongest players over multiple years.

#### HONOURS AND AWARDS

2021

RFID-based Pill Dispenser – Jugend forscht 2021 (special price, Regional Competition Donau-Hegau) – Stiftung Jugend forscht e. V.

Developed an RFID-controlled pill dispenser with app-based operation, using Arduino for hardware control.

2020

Automated Pill Dispenser – Jugend forscht 2020 (2nd place, Regional Competition Donau-Hegau) – Stiftung Jugend forscht e. V.

Developed a pneumatic system for dispensing patient-specific pill boxes, recognized by color and controlled via a Fischertechnik TXT controller.

#### LANGUAGE SKILLS

Mother tongue(s): **GERMAN** 

Other language(s): LATIN

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production Spoken interaction		
ENGLISH	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

#### SKILLS

mathematics | physics | chemistry | Microsoft Office | CAD software | Fusion360 CAD | C++ | HTML (HyperText Markup Language) | CSS | Figma (web prototyping) | Adobe, Premiere Pro | social Media

### PROJECTS

2025 - CURRENT

### **Development of a Personal Website**

Ongoing creation of a personal website to showcase my technical projects, skills, and interests. The site is developed from scratch using HTML, CSS, and JavaScript, emphasizing clean design, user-friendly navigation, responsiveness, and accessibility.

2024 - 2025

### **Development of a Custom-Built Racing Simulator**

Designed and built a 3D-printed wheel base with a torsion spring for steering resistance and an optical rotary encoder for angle detection. The system is controlled via Arduino (C++) and demonstrates practical skills in sensor integration, mechanical design, and embedded programming.

09/2023 - 06/2024

## Seminar Paper - "V2 Rocket: Weapon of Mass Destruction with Untapped Potential?"

Independent research project as part of my German Abitur. The paper explored the technical foundations, historical development, and ethical implications of the German V2 rocket. It combined historical analysis with basic principles of modern rocketry and served as a written component replacing an oral examination.