

# Elias Wachmann

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## EDUCATION

### GRAZ UNIVERSITY OF TECHNOLOGY

DIPL. ING. TECHNICAL PHYSICS | GPA (CURRENT): 1.18 (1 BEST; 5 WORST)

APPLIED PHYSICS (ERASMUS-EXCHANGE AT TU DELFT)

BSC. SOFTWAREENGINEERING AND MANAGEMENT | GPA: 1.0 (1 BEST; 5 WORST)

Graz, AT | 2020-today

Oct 2023 - today

Delft, NL | Sep 2024 - Jan 2025

Oct 2020 - Jun 2024

- Focus: Computational Physics, Monte-Carlo Simulations, Statistical/Machine Learning
- Tutor: Data Structures and Algorithms (winter terms 22 and 23)

### KARL-FRANZENS-UNIVERSITY

BSc. PHYSICS | GPA: 1.32 (1 BEST; 5 WORST)

Graz, AT | Oct 2020 - Jul 2023

- Thesis: Investigating Cellular Automata in Physics: A Case Study of Diffusion and Close-Packing of Equal Spheres
- Teaching: Introduction to Programming (summer terms 23, 24 and 25)

### BG/BRG - FÜRSTENFELD

AHS-MATURA (A-LEVELS) | GPA: 1.0 (1 BEST; 5 WORST)

Fürstenfeld, AT | Sep 2011 - Jun 2019

- Thesis: How a Blockchain Works Using Bitcoin as an Example [DE]
- Lead organization and finances for school prom (profit > 60 000 €)

## WORK EXPERIENCE

### ANTON PAAR GMBH | INTERN | RD DIVISION MANAGEMENT

Graz, AT | Jul 2024 – Aug 2024

- Co-developed strategy for responsible AI implementation & compliance at Anton Paar, aligning with the AI Act
- Spearheaded AI compliance framework development for products & business processes

### ERNST & YOUNG WBG MBH | INTERN | FINANCIAL RISK CONSULTING

Frankfurt, DE | Jul 2023 – Oct 2023

- Co-developed a credit risk scorecard (PD) for 7 country subsidiaries of large German bank (corporate portfolio)
- Implemented semi-automated reporting process (IRB-approach) using R-shiny and SQL-databases

### AVL LIST GMBH | INTERN | ADVANCED SIMULATION TECHNOLOGIES

Graz, AT | Jul 2022 – Aug 2022

- Validated FE-simulations with reduced sampling for synchronous permanent magnet- & induction machines
- Streamlined and automated the validation process with Python scripts

### NIDEC CORPORATION | INTERN | R&D - GLOBAL APPLIANCE

Fürstenfeld, AT | Aug 2021 - Sep 2021

- Analyzed data and optimized cost with international team for a new fridge compressor platform.
- Development and implementation of a web scraper for market analysis of refrigeration equipment

## EXTRA-CURRICULAR ACTIVITIES

### FIRE DEPARTMENT | VOL. FIREFIGHTER & BOARD MEMBER IT

Großhartmannsdorf, AT | Jan 2011 - today

### CIRCLE OF EXCELLENCE | YEAR OF 2022 & BOARD MEMBER (2023 & 2024)

Graz, AT | Jan 2022 - Oct 2024

- High potential program for 20 students across 4 universities
- Charity project: self-made recipe calender with net profit (> 10 000 €) donated to orphans from Ukraine

## AWARDS

**Merit-Based Scholarship** in Physics (4x) 2020-24

**Merit-Based Scholarship** in SEM (3x) 2020-23

**Chemistry Olympiad (state)** silver medal 2018 & 2019

**Goju-Ryu Karate** National junior champion Kumite < 68 kg

**Dr.-Hans-Riegel-Fachpreis** for graduation paper

**Member of MINTTANK Graz** - Kaiserschild-Stiftung

**ISF - Orienteering School WC Italy 2017** Top 35

**ISF - Orienteering School WC Turkey 2015** Top 25

## SKILLS & INTERESTS

**Languages:** **German** (native) | **English** - EF SET English Certificate 88/100 (C2 Proficient)

**Software:** Python | C | C++ | MPI | R | Git |  $\LaTeX$  | MS Office | Linux

**Interests:** Orienteering | Running | Karate | Drumming | Skiing