

# Curriculum Vitae - Corinna Elena Wegner

Last updated: March 2025

## Education

October 2023 – present	M.Sc. in Physics <i>Georg-August-University, Göttingen</i>
October 2019 – April 2023	B.Sc. in Physics <i>Ludwig-Maximilians-University, Munich</i>
August 2010 – June 2019	Abitur, average grade 1.1 <i>Robert-Bosch-Gesamtschule, Hildesheim</i>

## Research experience

October 2024 – present	Research assistant in the NLP group at University of Göttingen <ul style="list-style-type: none"><li>Investigation of LLM's problem solving abilities</li></ul>
May 2023 – July 2023	Research assistant in the lab of Prof. Dr. Ferenc Krausz (Nobel laureate in physics 2023) <ul style="list-style-type: none"><li>Further investigation into Bachelor Thesis project, including publication writing</li><li>Working on a generative adversarial network to simulate blood spectra of artificial patients</li></ul>
September 2022 – March 2023	Bachelor Thesis <ul style="list-style-type: none"><li>Supervisors: Prof. Dr. Ferenc Krausz and Dr. Kosmas V. Kepesidis</li><li>Title: "Denoising of blood-based infrared spectroscopic fingerprints with deep learning"</li><li>Designed and trained a denoising autoencoder to preprocess spectra from blood plasma for cancer detection via machine learning</li></ul>

## Publications

**Corinna Wegner**, Zita I. Zarandy, Nico Feiler, Lea Gigou, Timo Halenke, Niklas Leopold-Kerschbaumer, Maik Krusche, Weronika Skibicki, Kosmas V. Kepesidis (2025). "**Toward informative representations of blood-based infrared spectra via unsupervised deep learning**", *Journal of Biophotonics* [[PDF](#)]

## Teaching experience

April 2025 - present	Teaching assistant, Deep learning for Natural Language Processing at University of Göttingen
October 2024 – March 2025	Teaching assistant, Programming for Data Scientists at University of Göttingen <ul style="list-style-type: none"><li>Tutorials in data science related python programming</li><li>Supply lecturer (two times during the semester)</li><li>Grading of projects and oral exams</li></ul>
October 2023 – March 2024	Teaching assistant, Mathematical methods for physicists at the University of Göttingen

	<ul style="list-style-type: none"> <li>• Tutorials on various topics in analysis, linear algebra and analytical geometry</li> <li>• Exam preparation lectures</li> <li>• Exam supervision and grading</li> </ul>
September 2023	Teaching assistant, Physics lab course for dentistry students at the University of Munich <ul style="list-style-type: none"> <li>• Supervision and grading of experiments on X-rays</li> </ul>
January 2023 – February 2023	Ski instructor, Technical University of Munich
October 2022 – January 2023	Teaching assistant, Physics lab course for medical students at the University of Munich <ul style="list-style-type: none"> <li>• Supervision and grading of various experiments</li> </ul>

## Languages

German (*native speaker*)

English (*proficient*)

Spanish (*good knowledge in writing and speaking*)

## IT skills

Python (*expert*)

MATLAB

R

JavaScript

HTML/CSS

LaTeX

Git

C

C++

Docker

High performance computing (SLURM)

## Volunteer Work

November 2023 – present

Active member of physics student council at University of Göttingen

- Website hosting
- Event organization
- Consultative student member of master selection commission
- engagement in national conferences for physics student councils

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October 2021 – October 2023	Active member of physics student council at University of Munich
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### Summer schools attended

September 2024	International Computational Cognitive Science Summer School, <i>Osnabrück</i>
July 2024	NeuroAI: Harnessing AI to understand computation in mind and brain, <i>Amsterdam</i>
March 2024	Interdisciplinary College: Resilience, Robustness, Responsibility, <i>Soest</i>