# Alexander Kovrigin

# Bremen, Germany

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## EDUCATION

Constructor University Sept. 2022 - Expected Aug. 2024 Bachelor of Computer Science Bremen, Germany

Transferred from:

**Higher School of Economics** Bachelor of Applied Mathematics and Computer Science Sept. 2021 - Aug. 2022 St. Petersburg, Russia

EXPERIENCE

JetBrains Research Nov. 2023 - Present

ML Research Intern

Remote

Bremen, Germany

NLP Research

• Working on the Code Editing task for large repositories

Leveraging language model techniques for processing vast code bases

Sep. 2023 - Dec. 2023 Constructor University

Teaching Assistant

Mathematics

o Held weekly seminars for the Analysis course

• Came up with challenging problems for practice

• Engaged with students about mathematical concepts

Huawei Munich Research Center

June 2023 - Aug. 2023

Darmstadt, Germany

C++ PyTorch

Intern

o Collaborated to enhance the efficiency of a privacy-preserving machine learning framework

Leveraged CPU/GPU PyTorch backends to optimize performance

o Achieved a twofold increase in the model execution speed

#### **PROJECTS**

## Learning to Discover Conservation Principles

Jan. 2023 - May 2023

Deep Learning Research

- o Collaborated on a research project focused on finding conservation laws under direct guidance of Andrey Ustyuzhanin (h-index 125)
- Applied deep learning methods to extract conservation principles from experimental data, aiming to improve system integration robustness and simplify equations
- o Contributed to a future conference paper detailing our novel approach using deep learning techniques

Jan. 2022 - June 2022 Cavoke

C++ Qt Docker SQL

- Developed a framework for creating and hosting turn-based board games
- o Devised integrated solutions for game development challenges: game state persistence, liaison between client and server, user authentication, multiplayer support, etc.

Wikirace Dec. 2021

Python Django Heroku Websockets

- o Developed an online single-/multiplayer game about traversing links from one Wikipedia page to another
- o Incorporated asynchronous websockets for seamless multiplayer gameplay

# ACHIEVEMENTS

ICPC Northwestern Europe Regional Contest (NWERC) — Silver Medal, 150 teams Nov. 2023 Algorithms C++ Teamwork Delft, Netherlands

International Mathematics Competition — First Prize, top 10%, 390 contestants Mathematics Problem-solving

Aug. 2023

Blagoevgrad, Bulgaria

# SKILLS

- Programming languages: C++, Python, Java, Kotlin, Typescript, Haskell
- Technologies: Terraform, Docker, LATEX, SQL
- Languages: English (C1), German (C1), French (A2), Russian (Native)