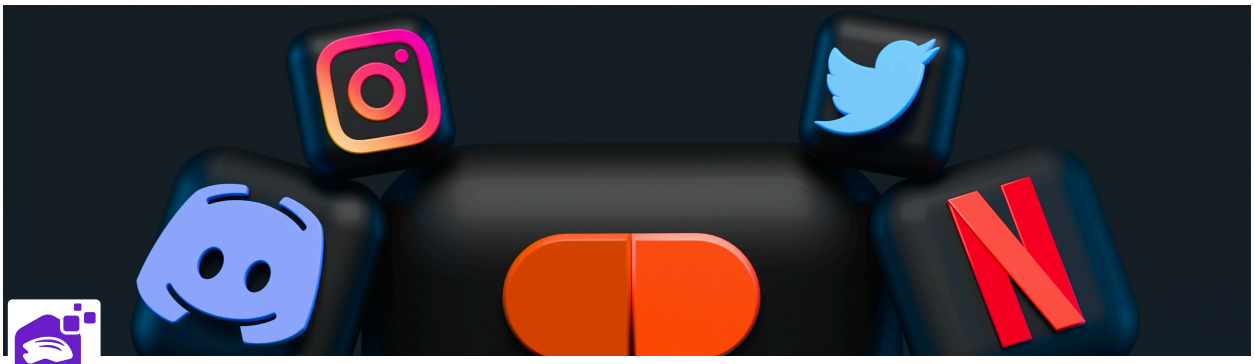


IDP @ Helmit: Pioneering AI for Online Safety

Get real startup experience with an IDP at the frontier of **AI, child safety and social media**, and earn **16 ECTS** while contributing to our exciting venture. You will help shape technology that could become the default safety layer for every child's first smartphone.

> 💡 **Interdisciplinary Projects (IDPs):** If you are a TUM master's student in computer science, you can conduct practical work at our startup and gain 16 credits. Learn more here.

Application Deadline	October 31, 2025 (slots may be filled earlier)
Start Date	ASAP
Duration	3–6 Months (min. 16h/week, full-time preferred)
Compensation	16 ECTS
TUM Supervising Chair	Chair for Human-Centered Computing Prof. Jana Diesner jana.diesner@tum.de / hcc@sot.tum.de
Location	Munich (at least 2 days/week on-site)
Where to apply	hiring@helmit.org

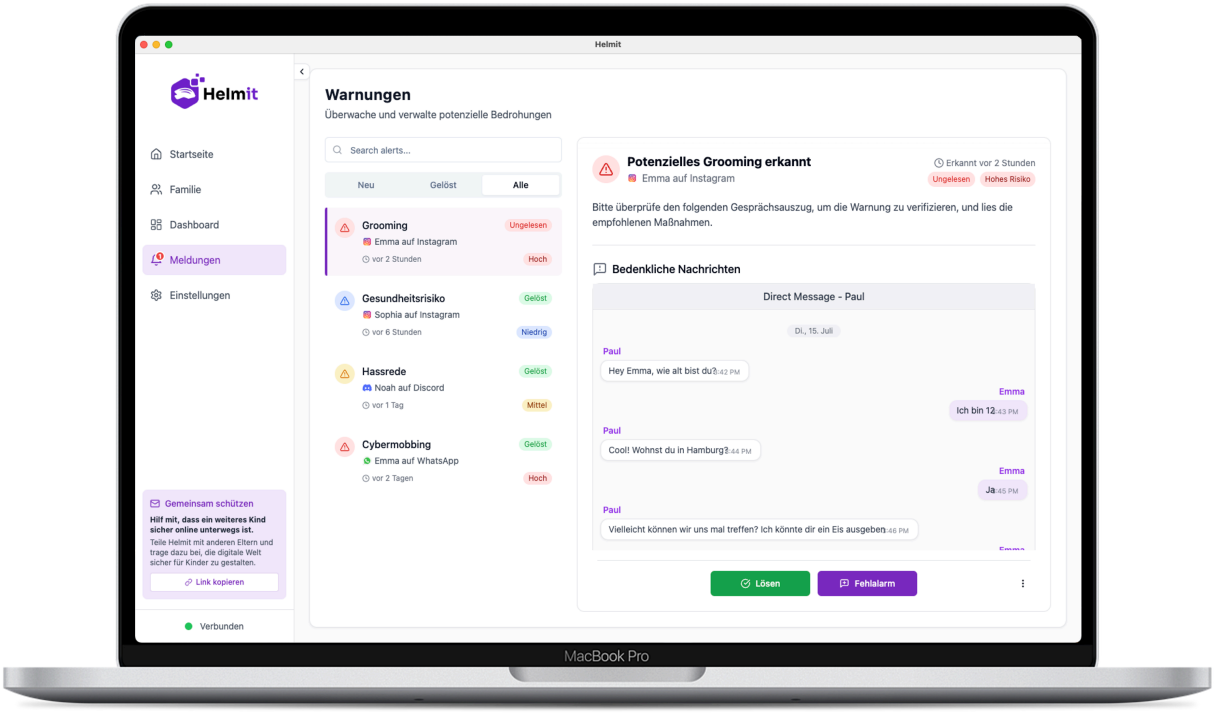
🪄 What we do

> **We are building Machine Learning systems to make the internet a safer space for children.**

Digital violence is a growing threat, with millions of children facing cyberbullying, online harassment, and predators. At Helmit, we are on a mission to protect children from these digital threats by providing an AI-powered safety solution that detect threats across text, images, audio, and video while keeping

data 100% private. Parents are alerted only when it truly matters, bridging the gap between protection and independence.

Helmit is a Munich and Zurich based startup, backed by EWOR (Europe's leading accelerator), are we are moving fast. Our vision is bold: to become the global standard for digital child safety. To get there, we are hiring talented and ambitious students who want to put their skills to work and helps us scale rapidly.



What you will work on

At Helmit, wou will help us develop **high-performing yet lightweight, multi-modal ML models that run entirely on-device** and **flag potentially harmful conversations**. You will dive deep into state-of-the-art ML, from multimodal analysis (text, image, audio, video) to model compression and quantization, and turn cutting-edge research into systems that run on everyday devices. And since we are operating in a space where human values matter as much as technical breakthroughs, you will also grapple with ethical, culturan and contextual dimensions of online safety.

Project Tracks (choose your battlefield):

1. **LLM Distillation & Finetuning:** Compress large language models into efficient small language models (SLMs), tailored for harmful content detection and optimized for real-time, on-device deployment.
2. **Federated Learning Pipeline:** build a federated learning pipelinie that enables families' devices to collaboratively improve detection models while ensuring no raw data ever leaves the device

(differential privacy, flower.ai, ...)

2. **Local "Child GPT":** Build a child-friendly chat bot that can educate, support, and answer children's questions safely - deployed directly on smartphones.
3. **Parent App Development (Smartphone):** Build an intuitive iOS app for quick access to their parent dashboard, with potential for integrating lightweight AI analysis.
3. **Image & Video Safety:** Develop models that flag inappropriate or harmful visual content, using techniques like similarity detection and multimodal fusion
4. **Audio Threat Detection:** Analyze voice messages for threatening language or tone, enabling protection across extended communication channels
5. **Sentiment & Pattern Mining:** Classify sentiment of conversations and network clusters and build models that flag risk patterns across time, frequency, and other statistical properties.
6. **Platform Intelligence:** Dive deep into the internals of social media platforms and messaging apps to help us connect to social media and messaging apps in novel ways.

You will work **side-by-side with our founding team** on core product challenges. You will have access to Cloud credits (AWS, Azure, Google Cloud) to fuel your experiments. Your contributions will go straight into the product used by hundreds of families. Outstanding work could lead to follow-up internships or full-time roles at Helmit.

> This isn't just an IDP. It's your chance to **step out of the university bubble, solve frontier problems and build tech that could become part of every child's digital life.**

💻 What you bring along

To succeed in our project, we recommend students to bring the following skills

- **Startup Spirit:** you are proactive, resourceful and energized by taking ownership in an environment where speed matters more than hierarchy
- **Technical Talent:** You have strong programming skills (preferably Python or Go) and love building things
- **Problem-Solving Mindset:** complex challenges excite you and you enjoy finding elegant and creative solutions where others see dead-ends
- AI & ML Know-How: Experience with modern AI and Machine Learning concepts and frameworks (PyTorch, sklearn, ...) or full-stack development, Experience with (local) LLMs (e.g. Llama, Qwen, etc.) is beneficial
- Awareness of responsible computing as a subfield at the nexus of computing, social science, law, and business

🎯 Why Helmit

- **Join an exceptional team:** Our team has experience from BCG, BMW and Allianz, graduated top of class and studied at TUM, ETH, NUS and University of Toronto. We hire top talent and help you reach your full potential as your teammates.
- **Experience Startup Energy:** From our weekly Munich rooftop sundowners 🌇 to intense build sprints, you will feel the mix of ambition, team spirit and lots of fun. We have a pool at the office btw ... ;)
- **Technical Benefits:** Learn how to distill and optimize LLMs for consumer hardware, push the limits of low-compute inference and work on state-of-the-art models for harmful content detection
- **Insights into the early stage of building a startup:** Be at the front row of a startup's most exciting phase (launch, market-entry, fund raising, etc.) and see how an idea becomes a company
- **Build something with high societal impact:** Your code will be deployed to real families and directly tackles one of the most pressing challenges in child safety while advancing the state of privacy-first AI.

🧙‍♂️ Meet the Founders

We are Alex and Leonardo, the founders of Helmit. We are EWOR fellows that bring experience from BCG, BMW and Allianz and graduated top of class from ETH, TUM, University of Toronto and NUS.

Alexander Wolters

Co-Founder

Background:

Before co-founding Helmit, Alexander worked in management consulting at BCG and applied Machine Learning to improve the automotive manufacturing processes at BMW. Furthermore, he draws ML research experience from the Statistical Machine Learning Group at ETH where he developed a novel clustering algorithm and co-authored a NeurIPS paper.

Alexander holds a degree in Electrical Engineering and Information Technology from

Leonardo Benini

Co-Founder

Background:

Prior to co-founding Helmit, Leonardo worked as a Data Scientist in insurance pricing at Allianz. He then led a team of developers at Global Telco Consult, where he spearheaded the development of a network quality testing software for the mobile networks sector. Following this, he conducted research at DLR, contributing to the development of some of the world's most advanced robotic hands.

TUM and studied at NUS and ETH Zurich. Alexander paused his masters in Machine Learning at ETH to start Helmit.

🔗 LinkedIn

✉️ Email

Leonardo holds a B.Sc. in Mathematics from TUM and also studied at the University of Toronto.

🔗 LinkedIn

✉️ Email

✨ Partners

🚀 We are waiting for you!

We're early on our journey, so joining Helmit means you'll have the chance to not only witness but actively shape everything we do (from tech stack to strategy) and contribute to the early achievements of the exciting path ahead.

If you're passionate, ambitious and ready to create real societal impact with technology, we'd love to hear from you! Shoot us a message including your **CV and Transcript** to **hiring@helmit.org** and **jana.diesner@tum.de** or connect with us via LinkedIn (**Alex** / **Leonardo**).

Please include the project track you're most excited about and tell us why you'd be a great fit. Have a **project** you're proud of? Show us! Share your GitHub, a demo, or anything that proves you are a true builder.