

Ankush Ahuja

+43-670-559-4004 | ankush@ahuja.app
www.ahuja.app

EXPERIENCE

ZeltLabs

Founder

04. 2026 - Ongoing

Vienna, Austria & Munich, Bavaria

- Building a software agency; focus on web applications, SaaS development and agentic process automation

Freelance

Full Stack Engineer

01. 2026 - 04. 2026

Vienna, Austria

- Offered services in full-stack development, AI migration, and process automation
- Clients include SaaS startups and local businesses

Technical University of Vienna

Machine Learning Intern (Full-time)

07. 2024 - 08. 2024

Vienna, Austria

- Developed a search engine to find documents distributed on various platforms with one query
- Conducted ML research, compared different indexing and data retrieval methods

Dynatrace Austria GmbH

Software Engineering Intern (Full-time)

07. 2024 - 08. 2024

Vienna, Austria

- Developed workflow actions for the Dynatrace Slack App
- Gained insights about designing large applications and project management with SCRUM

Extra: Emergency Medical Technician (Alternative Civilian Service)

EDUCATION

Technologisches Gewerbemuseum (TGM)

A Levels (Matura)

09. 2020 - 06. 2025

Vienna, Austria

- Specialized in Data Science & AI within the Department of Information Technology
- Diploma Thesis on efficient indexing & semantic search methods
- Activities: Student representative, class representative, fire emergency response team
- Graduated with distinction; GPA: 1.09 (Austrian grading scale: 1 = excellent, 5 = fail)

University of Vienna

Summer Courses, Computer Science & Astronomy

08. 2024

Vienna, Austria

PROJECTS

Listable: Create, share and automate lists

Tools: Rust, Vue.js

06.2025 Ongoing

Synchronization

- Universal List abstraction with configurable CRUD behaviors to model Sets, Maps, queues, and more
- Real-time CRDT engine in Rust with conflict resolution across clients
- Reactive Vue.js frontend reflecting structural changes instantly

Axion: High-performance approximate nearest neighbor search library

Tools: Rust

09.2024 Ongoing

Machine Learning

- ANN search engine using cosine similarity, optimized for high-dimensional vector spaces
- k-means clustering for data partitioning and similarity grouping
- Embeddable Rust library focused on low latency and minimal memory overhead

WTP Lib: C++ Robotics Library for the WeThePeople Team

Tools: C++

10.2024 07.2025

Robotics / Embedded Systems

- C++ library for the school's Botball team covering motor control, sensor integration, and navigation
- PID-based servo control and correction behaviors for precise actuation
- Path calculation, intersection management, inverse kinematics and multi-robot collision avoidance

PATENTS AND PUBLICATIONS

C=CONFERENCE, J=JOURNAL, P=PATENT, S=IN SUBMISSION, T=THESIS

- [C.1] Ahuja, Ankush and Kernegger, Leopold (2025). **Choros: A Distributed Coordination Framework for MultiRobot Botball Systems**. In *Proceedings of the Global Conference on Educational Robotics (GCER 2025)*. KISS Institute for Practical Robotics, July 812, 2025, Norman, OK.
- [C.2] Kernegger, Leopold and Ahuja, Ankush (2025). **A Next.js BlocklyBased C++ Code Generator for a Custom Robotics Library**. In *Proceedings of the Global Conference on Educational Robotics (GCER 2025)*. KISS Institute for Practical Robotics, July 812, 2025, Norman, OK.
- [T.1] Ahuja, Ankush, et al. (2025). **Kayf.app: Data Centralization and Automation Platform**. Diploma thesis, Department of Information Technology, Technologisches Gewerbemuseum, Vienna, Austria. Supervisors: Prof. Raffael Hackspiel and Prof. Alexandra Posekany.

HONORS AND AWARDS

Jugend Innovativ 3rd Place

05.2025

AWS

- Austria's leading competition for innovative student projects, with over 440 competing teams.
- Achieved 3rd place in the category Entrepreneurship with the project *Kayf.app*.

Sag's Multi Finalist

04.2025

ORF

- Austria-wide multilingual speech competition hosted by ORF, promoting cultural diversity and expression.
- Reached the finals with a bilingual speech in English and German.

Austrian Olympiad in Informatics

2024 & 2025

OCG

- Austria's most prestigious and competitive algorithms and programming competition for high school students, organized by the Austrian Computer Society (OCG).
- In 2025: scored a perfect result in the first qualification round; placed among the Top 16 in the national semi-finals.

Award for Excellent GPA & Social Engagement

2021/2025

Technologenverband

- Annual award by the TGM alumni association for academic excellence and community engagement.
- Honored each year for a perfect GPA and contributions such as tutoring, organizing the prom, and the sports festival.

ADDITIONAL INFORMATION

Languages: German (native), Punjabi (native), English (fluent)

Certifications: Emergency Medical Technician Training, Fire Safety Officer Training, Unternehmerfuehrerschein

Interests: Super Total Training, Public Speaking, Competitive Programming