Zijian Zhang

- **Date of Birth**: 1999-08-30 | **Nationality**: China | **Gender**: Male
- **Phone**: (+86) 15609250830 (China) / (+49) 015209993928 (Germany)
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Education

RWTH Aachen University

M.Sc. in Computer Engineering | Apr 2023 – Apr 2026

- **Projects**:
  - Autonomous vehicle noise measurement using Raspberry Pi;
  - Convex optimization in communications and signal processing
- **Master Thesis**: Implementation of Accelerated Projected Gradient Descent (APGD) Solver for Multibody Dynamics Simulation

Xidian University

B.Eng. in Electronic Information Engineering | Sep 2018 – Jun 2022

- **Performance**: GPA 3.5/4, Top 20%, two-time university scholarship recipient
- **Undergraduate Thesis**: Intelligent Vehicle License Plate Recognition System (Template Matching & CNN-based)

Skills

- **Programming**: C/C++, Python, MATLAB
- **Toolchains/Platforms**: Linux, Git, VEROSIM, Chrono, KaihongOS, OpenHarmony
- **Embedded/Drivers**: Infineon TriCore, RK3568 SoC, MCU peripheral development
- **Algorithm & Simulation**: APGD, LCP, QP modeling, automated testing, performance analysis
- **Languages**: English (TOEFL 102), German (A1), French (A2)

Projects

VEROSIM Platform – Core Numerical Solver Development RWTH Aachen, MMI Institute | May 2025 – Apr 2026

- Designed and implemented the APGD-based core solver with Nesterov acceleration for large-scale multibody dynamics.
- Led QP/CCP constraint modeling and NSC (non-smooth contact) integration for automated physical simulation.
- Developed automated modeling and performance analysis tools, supporting parallelism and scalability (C++, numerical optimization, platform integration).

Work Experience

MCU Engineer | Intel Sep 2023 – Feb 2024 | Intelligent Cockpit & AI Infrastructure

- Developed/optimized MCU–SoC/EC multi-protocol comms and core system modules for heterogeneous integration.
- Contributed to on-device AI model deployment and inference acceleration, supporting edge AI applications.
- Led firmware automation and CI for scalable, reliable system delivery.
- Stack: C, RTOS, embedded debugging, system optimization, AI model integration

Linux Driver Engineer | Shenzhen Kaihong Digital Aug 2022 – Mar 2023

- Developed/optimized OpenHarmony-based drivers and hardware abstraction.
- Led USB server, hot-plug, and protocol module design; delivered end-to-end product debugging and release.
- Stack: C/C++, OpenHarmony, driver development, automation testing
- **Patent**: Intelligent License Plate Recognition System (undergrad thesis)