# Xianghe Ma

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*"Be the change that you want to see in the world."*

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**Looking forward to connecting and learning more about opportunities at Hyundai Mobis**

Dear Hiring Manager,

## About Me

**Education:** I completed my master's degree in Scientific Computing at Heidelberg University this year and have a bachelor's degree in Computer Science and Technology.

**Experience:** I have about 4 years of work experience overall. Currently, I am doing an internship as a computer vision engineer at Hyundai Mobis Europe, focusing on 3D vision and scene perception for autonomous driving. Previously, I was a natural language processing researcher at the Heidelberg Institute for Theoretical Studies (HITS) and a full-time software engineer at Huawei Digital Technology.

**Academic:** While researching at HITS and Heidelberg University, I published two papers as a first author and presented at the top natural language processing conference, the EACL. My interests lie in computer vision, autonomous driving, and physics.

**Hobby:** In my spare time I enjoy video games, swimming, skiing, running, cycling, and traveling.

## Why Hyundai Mobis ?

This position aligns perfectly with my skills and interests, motivating me to apply. My experience closely matches the qualifications outlined in the job posting. I have been an intern as a Computer Vision Engineer at Hyundai Mobis for over a year, during which I've greatly enjoyed collaborating with the team and truly appreciate my time here. My managers have also recommended me for a long-term career, and I am eager to continue contributing my knowledge and skills to Hyundai Mobis.

## Why me?

- I have bachelor's and master's degrees in Computer Science and good academic records with two first-author publications.

- I have around 3 years of experience in developing perception algorithms in LiDAR and Computer Vision when I worked at Hyundai, Heidelberg SSC, and Institute of Geography of Universität Heidelberg.

- I am proficient in Python, C/C++, and embedded systems, and have made significant contributions to both open-source libraries and company projects. For instance, I have 2 years of experience at Huawei developing browser kernels and network algorithms using C/C++. Additionally, I independently contributed to Baidu's PaddlePaddle open-source deep learning operators with C++ and CUDA GPU programming. I also have around 3 years of experience in Python, gained while working at Hyundai, HITS, and Heidelberg SSC.

- I was familiar with toolchains and build tools when I worked at Huawei. For instance, I used Make and CMake to build Huawei's network forwarding software, utilizing conditional compilation in makefiles to manage software versions across different chips and embedded systems. Additionally, I worked with the Ninja build tool to compile and build the browser kernel and application.

- I am good at Linear Algebra, data structure and algorithm with excellent grades 1,0/1,0 on both.

- I have good knowledge and experience with software design utilities, such as GIT, Docker, Kubernetes, software design patterns, high performance computing, and would like to know more about ROS, TIOVX, RTMAPS etc.

I am confident that my technical expertise in computer vision, and programming, combined with my enthusiasm for Hyundai Mobis 's mission makes me a strong candidate for this role.

Thank you for considering my application. I look forward to the possibility of connecting with you.

Sincerely,

**Xianghe Ma**