Dear Dr. Maximilian Hofmann,

I am writing to provide a reference for Zhengnan Ma, who has requested my support in his application for the position of "Research Associate - Development of Electric Motors for Vehicle Applications" at the Fraunhofer Institute. As Zhengnan's advisor, I hold a high regard for his capabilities and I am pleased to fulfill his request by providing this letter of reference.

Throughout my interactions with Zhengnan, he has consistently impressed me with his diligent work ethic, quick thinking, and strong learning abilities. Despite the challenging nature of the tasks assigned to him, Zhengnan successfully acquired skills in programming languages such as C/C++, MATLAB/Simulink, and MCU programming within a relatively short timeframe, and effectively applied these skills to various projects.

Zhengnan joined my research group in the summer of 2016 and became a valuable member of my wireless power transmission project team. In this role, he was primarily responsible for system solution simulation, DSP (TMS320F28335) code writing, and hardware debugging. Through his dedication and cooperation with other team members, Zhengnan made significant contributions to the successful completion of the project. In the summer of 2017, Zhengnan and another classmate collaboratively undertook the PMSM driver project. Zhengnan's main responsibilities involved simulating the control scheme and writing the control code, while his classmate focused on the hardware circuitry. Working together, they successfully conducted the project experiments, which culminated in Zhengnan's graduation thesis titled "Permanent magnet synchronous motor vector control system with dead zone compensation."

During his master's degree, Zhengnan consistently demonstrated the following notable abilities and characteristics:

1. A strong aptitude for learning: Zhengnan showcased his ability to supplement theoretical knowledge and effectively apply it in practical problem-solving situations. He displayed a keen interest in expanding his knowledge base through reading relevant papers and engaging with supplementary materials.

2. Independent problem-solving skills: When confronted with project-related challenges, Zhengnan exhibited a remarkable capacity for identifying underlying causes and generating effective solutions. He took the initiative in resolving issues independently, showcasing his resourcefulness and analytical mindset.

3. Excellent teamwork skills: Zhengnan is an adept collaborator, consistently achieving project goals alongside fellow team members. While simulating control schemes and writing control code were his primary responsibilities, he actively engaged with and supported other team members during

circuit testing. Additionally, Zhengnan exhibited proactive communication by providing regular progress updates and sharing project experiences with the team.

4. Intrinsic motivation and passion for the subject: Zhengnan consistently displayed a strong interest in his field of study and exhibited an unwavering motivation to engage in independent learning, particularly during the course of our projects.

I trust that the information provided above will aid you in evaluating Zhengnan Ma's application and considering him favorably for the position. Should you require any further information or have any additional queries, please do not hesitate to contact me.

Yours faithfully,

Prof. Yongqin Zhou

Harbin University of Science and Technology