Recommendation Letter

November 17, 2024

Dear Admissions Committee,

I am writing to highly recommend Erzhuo Wang for admission to the Mathematics PhD program. I am the professor for the courses Topology and Abstract Algebra, and Erzhuo has been an exceptional student in both.

In Abstract Algebra, we cover fundamental concepts such as groups, rings, fields, and modules, along with the proof of the Fundamental Theorem of Galois Theory. In Topology, we focus on point-set topology, the fundamental group, and covering spaces. Erzhuo has demonstrated a deep understanding of both subjects, earning impressive grades (94/100) in each course. This success is a direct result of his well-organized homework and thorough proofs in the final exams—an achievement only a few students attain.

Beyond excelling in the classroom, Erzhuo frequently engages with me in thoughtful discussions after class. For instance, when we discussed the classification of closed surfaces, he asked interesting questions regarding the definition of orientability for topological manifolds without a differential structure.

Additionally, Erzhuo has shown a strong self-driven interest in advanced algebraic concepts. He has independently studied more advanced material from standard textbooks such as Dummit and Foote's Abstract Algebra and Matsumura's Commutative Ring Theory.

Given his intellectual curiosity and exceptional academic record, I am confident that Erzhuo has the potential to be an outstanding PhD candidate.

Qiang Zhang,
Associate Professor,
Department of Mathematics, School of Mathematics and Statistics,
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