



NORTHERN ILLINOIS UNIVERSITY

Department of Computer Science

Feb 17, 2025

Dear Sir or Madam,

I am pleased to support Umesh Vangapally's application for your position. He is currently pursuing his Master's degree in Computer Science in our department, maintaining a GPA of 3.8/4.0. He has been supported as a Research Assistant in my group.

Umesh took my Applied Machine Learning course, where he earned an A and ranked among the top 10% of students in the class. He demonstrated a strong understanding of machine learning concepts, both theoretically and in implementation. He also shows solid background in coding, and mathematics.

Additionally, I supervised him on a research project focused on federated deep learning, a field that requires both coding expertise and deep conceptual understanding. Throughout the project, he demonstrated strong work discipline and problem-solving skills. He independently studied academic papers and successfully implemented the algorithms.

Based on my observations, Umesh is hardworking, determined, and capable of achieving his goals. His quick learning ability and dedication make him well-suited for research and development roles. I am confident he will be a valuable asset to your team, and I wholeheartedly recommend him for the position. Please feel free to contact me if you need any further information.

Best regards,

A handwritten signature in black ink, reading 'Zhishuai Guo'.

Zhishuai Guo, Ph.D.

Assistant Professor

Department of Computer Science

Northern Illinois University