University of Nebraska Lincoln

MIDWEST ROADSIDE SAFETY FACILITY
College of Engineering

April 15, 2019

Dear Selection Committee of the Dwight D. Eisenhower Transportation Research Fellowship:

It is with great pleasure that I offer my recommendation on behalf of Mr. Ricardo Jacome for the Dwight D. Eisenhower Transportation Research Fellowship (DDETFP) program. I am extremely pleased with Mr. Jacome's progress, dedication, work ethic, and integrity, and I highly recommend him for this award.

I am Ricardo's master's thesis advisor since his arrival in the fall of 2017 at the Midwest Roadside Safety Facility (MwRSF) at the University of Nebraska-Lincoln (UNL). Ricardo immediately engaged in challenging research tasks, including conducting instrumentation data analysis in support of MwRSF's full-scale crash testing program, completing and publishing technical reports, conducting finite element analyses of vehicle crashes in support of barrier design evaluations, and is a veteran of our crash test documentation and analysis team. His work was instrumental in helping full-time MwRSF staff to determine system adequacy for federal crashworthiness criteria. In the fall of 2017, Ricardo began working on the MATC "Smart Barrier Systems" project, which is intended to develop a virtual lane-keeping assist system to alert drivers of potentially departing the roadway using vehicle-to-roadside infrastructure (V2I) communication. The project has evolved and obtained excellent results regarding vehicle controls, existing Advanced Driver Assistance Systems (ADAS), and guidance techniques, as well as instrumentation and processing algorithms. Ricardo is currently involved with system modeling and the relationship between vehicle stability controls and steering inputs.

Ricardo is both a student leader and inspiration. He has shown tremendous growth and self-discipline. At MwRSF, Ricardo frequently leads student teams and discussions. He has also been a tireless advocate for MwRSF in academics and has even recruited additional graduate students to come to UNL and study at MwRSF.

After graduation in May 2020, Ricardo intends to pursue a career in academia with a focus on vehicle dynamics and safety. He will use his acquired knowledge of autonomous and sensor systems on vehicles to investigate new, lighter materials and applications which are conducive for the future of transportation. I am confident that his determination, persistence, and willingness to tackle new challenges will propel him to a leadership position and excellence in the field of automobile design and analysis. I am pleased to recommend Ricardo for the DDETFP, as he is a deserving and capable candidate, and I urge you to accept his nomination. If you have any questions regarding Mr. Jacome, I would be pleased to answer them via email (cstolle2@unl.edu) or phone (402-472-4233). Thank you for considering this nomination.

Sincerely,

Cody Stolle, Ph.D.
Midwest Roadside Safety Facility
Research Assistant Professor, Mechanical and Materials Engineering Department
University of Nebraska-Lincoln
130 Prem S Paul Research Center at Whittier School
2200 Vine Street, Lincoln, NE 68583-0853
402-472-4233 | cstolle2@unl.edu