# Expert Opinion Letter (Confidential)

Analysis of Positional Requirements for National Interest Waiver

**EDUCATION**

***Ph.D., Mechanical Measurements for Engineering***

University of Padua, Padua, Italy, 2004—2007

***Master of Science in Mechanical Engineering***

University of Padua, Padua, Italy, 1998—2003

**RESEARCH INTERESTS**

* System Identification for biological, naval, and space applications
* Solid mechanics
* Automation and robotics
* Design of Mechanism
* Assistive devices for physical rehabilitation
* Bio-mimetics
* Ethical issues in Biomedical Engineering and Artificial Intelligence

**PROFESSIONAL EXPERIENCE**

***Associate Dean***

Gannon University, Erie, PA

*College of Engineering and Business,*  July 2022—Present

***Director of the School of Engineering and Computing***

***Professor***

Gannon University, Erie, PA

*Department of Biomedical, Industrial and Systems Engineering (BISE)*, May 2021—Present

***Department Chair***

Gannon University, Erie, PA

*Department of Biomedical, Industrial and Systems Engineering (BISE)*, July 2018—July 2022

***Associate Professor***

Gannon University, Erie, PA

*Department of Biomedical, Industrial and Systems Engineering (BISE)*, July 2018—May 2021

*Department of Mechanical Engineering*, August 2017— June 2018

***Director of Biomedical Engineering Program***

***Founder and President***

MP-Erie-Co. (pronounced empirico*),* Erie, PA

*Start-up research company housed in the Erie Technology Incubator*, January 2018—Present

***Assistant Professor***

Gannon University, Erie, PA

*Department of Mechanical Engineering*, August 2013—2017

***Director of Biomedical Engineering Program***

***Postdoctoral Fellow***

Rehabilitation Institute of Chicago - Northwestern University, Chicago, IL

*Sensory Motor Performance Program*, 2008—2013

Brandeis University, Waltham, MA

*Ashton Graybiel Spatial Orientation Laboratory*, 2007—2008

***Visiting PhD candidate***

Brandeis University, Waltham, MA

*Ashton Graybiel Spatial Orientation Laboratory*, 2004—2006

***Consultant***

University of Padua, Italy

Modeled and analyzed the propagation of vibration in the finger-hand-arm system and aerospace mechanisms. Developed an instrumented set-up to control specific environmental variables for exobiology purposes.

*Center of Studies and Activities for Space (CISAS)*, 2006—2007

*Department of Astronomy,* 2005

*Center of Studies and Activities for Space (CISAS),* 2004

*Department of Mechanical Engineering*, 2003

**TEACHING EXPERIENCE**

***Associate Professor***

Gannon University, Erie, PA

*Department of Biomedical, Industrial and Systems Engineering (BISE)*, July 2018—Present

*Department of Mechanical Engineering*, August 2017— June 2018

***Assistant Professor***

Gannon University, Erie, PA

*Department of Mechanical Engineering/Biomedical Program*, 2013—2017

***Lecturer***

Northwestern University, Chicago, IL

*Department of Biomedical Engineering*, 2010—2013

University of Illinois at Chicago, Chicago, IL

*Department of Biomedical Engineering*, 2012—2013

***Graduate Student Mentor***

Gannon University, Erie, PA 2018-2019

*Departments of Mechanical Engineering*

Gannon University, Erie, PA 2017

*Departments of Mechanical Engineering*

Gannon University, Erie, PA /San Luis Potosi, Mexico, 2017

*Departments of Mechanical Engineering* / *Mechatronics*

Gannon University, Erie, PA /University of Padua, Italy, 2016

*Departments of Mechanical Engineering* / *Computer Science*

Gannon University, Erie, PA /San Luis Potosi*,* Mexico, 2015

*Departments of Mechanical Engineering* / *Computer Science*

Northwestern University, Chicago, IL, 2010

*Department of Electrical Engineering*

University of Padua, Italy, 2004

*Department of Mechanical Engineering*

***Teaching Assistant***

University of Padua, Italy

*Department of Mechanical Engineering*, 2002—2004

**HONORS, AWARDS, and CERTIFICATIONS**

* Excellence in Undergraduate Advising Award for the College of Engineering and Business, *Gannon University,* 2016-2017
* Undergraduate Mentor Research Scholarship Award, *Gannon University,* 2015-2016
* ASB East Coast 2019 (ASB-EC) Poster award (1nd Place), 2019
* Northeast Bioengineering Conference (NEBEC) Poster award (2nd Place), 2016
* North Western Pennsylvania (NWPA) Collegiate Innovation Showcase

*Bio-Conduit* (GRAND PRIZE $2,000)

Description: Development of an antibiotic intramedullary rod. Students: Felice J., Bates K., Hendrix W., Mahle T., April 2015

* North Western Pennsylvania (NWPA) Collegiate Innovation Showcase

*Assessment of Hygienic Movements* (2nd Runner-Up $500)

Description: Development of an inexpensive apparatus for the assessment of hygienic movements. Students: Papich J., Kennett C.J., April 2014

* Passed certification examination for the Italian Board of Professional Engineers in Structural, Mechanical, Environmental, Industrial, and Information Engineering, Padua, Italy, 2004
* Honorary fellow in Mechanical and Thermal Measurements, University of Padua, 2004—2007
* Full merit-based doctoral scholarship: Mechanical Measurements, Italian Ministry of Education (MURST), Rome, Italy, 2004-2007
* Full merit-based scholarship for graduate study, Italian Ministry of Education (MURST), Rome, Italy,1997-2003

***Member of***

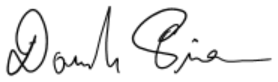
* IEEE Institute of Electrical and Electronics Engineers (EMBS, RAS)
* ASME American Society of Mechanical Engineers
* ASEE American Society of Engineering Education
* BMES Bio-Medical Engineering Society

I certify under penalty of perjury that: I have earned a Ph.D. in Mechanical Measurements for Engineering at University of Padua in Italy; a Master of Science in Mechanical Engineering at University of Padua in Italy.

I am providing this professional opinion letter based on my experience as a Professor and Associate Dean in the College of Engineering and Business at Gannon University in Erie, Pennsylvania.

The College I lead has two Schools; the School of Engineering and Computing and the School of Business. Gannon is a nationally recognized University, and our laboratories are state-of-the-art in the nation. The School of Engineering and Computing houses programs in Biomedical, Electrical, Environmental, Mechanical, as well as Industrial and Robotics Engineering, both at the undergraduate and graduate levels. The Business school houses among other programs an MBA with several tracks in business administration and business analytics, as well as a program in Supply chain management and logistics, which makes me particularly qualified to review the credentials of Jadson Paulino Alves da Silva.

My research is interdisciplinary; I have published more than 100 articles in Peer-reviewed Journals and conference proceedings. I have been cited in textbooks and am extensively involved in engineering presentations, research, and education. Among my achievements, I had the privilege to be chair of the Bio-Systems and Health Care (BSHC) and the Robotics Technical Committee, a part of the American Society of Mechanical Engineering (ASME) Dynamic Systems and Control Division.



Davide Piovesan

Professor and Associate Dean, College of Engineering and Business

Director, School of Engineering and Computing Gannon University