

JAMES WOLF

MS

727.648.1429
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BIOMECHANICS

PROFESSIONAL PROFILE

EDUCATION

MARQUETTE UNIVERSITY/
MEDICAL COLLEGE OF WISCONSIN

MS Biomedical Engineering 2024

MARQUETTE UNIVERSITY

BS Biomedical Engineering 2021

LICENSES & CERTIFICATIONS

FAA Remote Pilot Certificate

AFFILIATIONS

Sigma Phi Delta Engineering Fraternity

Mr. James Wolf received his BS in Biomedical Engineering, with a focus in Biomechanics, from Marquette University. He continued his education receiving his MS in Biomechanics from the joint department of Biomedical Engineering at Marquette University and Medical College of Wisconsin. His graduate research focused on injury biomechanics in vehicle-to-pedestrian collisions. During this research, he developed a 3D finite element model of a truck’s front-end and validated it using published physical test data to analyze pedestrian head and leg injuries. Throughout graduate school, he also assisted with frontal collision tests and vehicle-to-dummy collision tests.

Mr. Wolf is a Scientist at Explico’s Tampa Bay office. He supports the biomechanics team by reviewing and summarizing case related material, conducting vehicle and site inspections, and assisting in the biomechanical analysis of injuries. He uses state-of-the-art technologies to gather data and evidence and utilizes modeling and simulation software to analyze injuries and reconstruct accidents.

AREAS OF EXPERTISE

SOLIDWORKS
MATLAB
Ansys
LS-Dyna
MADYMO
Virtual Crash



EXPERIENCE

Explico

2026 - Present

Scientist

2024 - 2025

Associate Scientist

Medical College of Wisconsin

2022 - 2024

Graduate Research Assistant

Marquette University

2022 - 2023

Graduate Teaching Assistant

Xylem Inc.

2021

Technical Services Engineer

A.O. Smith Corporation

2019 - 2020

Materials Engineer Co-op

ENGINEERING PROJECTS

Master's Thesis Project, *Development and validation of a vehicle front profile finite element model to evaluate pedestrian impacts*, Marquette University, 2024

Multidisciplinary Capstone Design, Marquette University, 2020 - 2021

HONORS

Teaching Assistant of the Year: Biomedical Engineering, Marquette University, 2023

Pere Marquette Academic Scholarship, Marquette University, 2016 - 2021

PRESENTATIONS & PUBLISHED ABSTRACTS

Wolf, J. *Development and validation of a vehicle front profile finite element model to evaluate pedestrian impacts*, MS Student Paper Finalist at SB3C Conference, 2024.

PROFESSIONAL DEVELOPMENT

Society of Automotive Engineers

Apply Automotive EDR Data to Traffic Crash Reconstruction, May 2025
Vehicle Crash Reconstruction: Principles and Technology, October 2024

Institute of Police Technology and Management

Bosch CDR Tool Technician Training, Online, August 2024