



CURRICULUM VITÆ

MIREL AJDAROSKI

"Dr. Mirel Adjaroski, has conducted pioneering research in the areas of understanding, modeling, and preventing sports injuries. As an Injury Biomechanics Expert, he has been involved in the investigation and reconstruction of a diverse array of cases, from transportation-related accidents to product and premises liability accidents."

Ph.D. Mechanical Engineering

M.Sc. Bioengineering

B.S. Bioengineering

1. BIOGRAPHY

Dr. Mirel Adjaroski earned his Ph.D. in Mechanical Engineering from the University of Michigan-Dearborn, where he focused on leveraging wearable sensor technology to improve the measurement and understanding of knee joint kinematics, particularly in the context of non-contact anterior cruciate ligament (ACL) injuries. His work aims to support the development of more effective injury prevention and rehabilitation strategies.

Dr. Adjaroski has studied the accuracy of inertial measurement units (IMUs) and motion capture systems in measuring tibiofemoral angles and angular velocities during dynamic activities like simulated pivot landings. This work helps establish the strengths and limitations of using wearable sensors to track knee joint motions.

Dr. Adjaroski has explored methods like quaternion conversion to improve the accuracy of 3D tibiofemoral angle estimates from IMUs during high-velocity maneuvers associated with non-contact ACL injuries. Furthermore, He has developed predictive models to estimate leg forces and knee moments from IMU data, which helps identify high-risk loading patterns associated with non-contact ACL injuries.

Since joining LISKE Accident & Injury Experts, Dr. Adjaroski has applied his expertise to the forensic examination of accidents and injuries. As an Injury Biomechanics Expert, he has been involved in the investigation and reconstruction of a diverse array of cases, from transportation-related accidents to product and premises liability cases.

[Click here to request the full CV of Dr. Mirel Adjaroski](#)