# **VANNI ROA**

248.914.1622 vroa@explico.com

TRAFFIC ACCIDENT RECONSTRUCTION

### **EDUCATION**

THE COLLEGE OF NEW JERSEY

BS Mechanical Engineering 2022

#### **LICENSES & CERTIFICATIONS**

Engineering-in-training (EIT) 2021

## **AFFILIATIONS**

Society of Automotive Engineers American Society of Mechanical Engineers

## **PROFESSIONAL PROFILE**

Mr. Vanni Roa is a Scientist at Explico. Mr. Roa's area of practice involves the investigation and reconstruction of vehicle collisions. He holds a BS in Mechanical Engineering from The College of New Jersey and an EIT Certification. During Mr. Roa's undergraduate studies, he gained proficiency in 3D Modeling and Finite Element Analysis for mechanical design. For his senior capstone project, he designed and prototyped a solar desalination system geared toward providing clean water for Third World countries. Prior to Explico, Mr. Roa gained quality control, design, and assembly experience in the manufacturing industry.

At Explico, Mr. Roa supports the Accident Reconstruction team by reviewing incident-related documents, conducting inspections, and assisting in the analysis of vehicle collisions. He utilizes 3D modeling and simulation software to reconstruct an accident in a virtual environment. He also applies fundamental physics principles to analyze vehicle dynamics and damage after a collision. Mr. Roa is actively studying cutting edge scientific literature and pursuing newly relevant methods in Accident Reconstruction.

#### **AREAS OF EXPERTISE**

Root Cause Analysis
Evidence Documentation
Laser Scanning
Vehicle Accident Dynamics
Vehicle Damage Analysis
Accident Reconstruction Simulation





# **EXPERIENCE**

**Explico** 

2023 - Present Scientist

2022 Associate Scientist

**TBK Lambda-Americas** 

2021 - 2022 Mechanical Engineering Intern / Assembler

**Aerospace Manufacturing Inc.** 

2021 Quality Engineering Intern