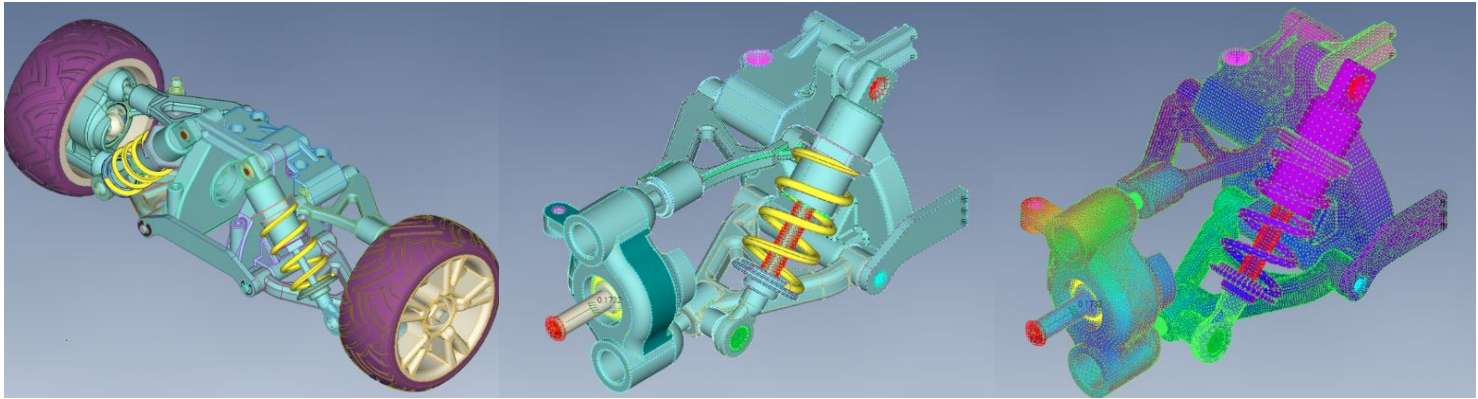


Car Suspension FEA Analysis



What?

Developed a detailed SolidWorks model of a car suspension system.

Performed static analysis on the suspension of a car by utilizing Femap/Nastran.

How?

Optimized CAD model by removing non-essential joints and secondary members.

Defeatured geometry for improved mesh quality and efficiency.

Implemented simplified joints, enforced constraints, and applied loads.

Results

Identified joint types and determined system weight using four distinct approaches.

Reported support reactions, internal loads, and maximum displacement with location details.

Presented critical stress data, including maximum Von Mises and Principal Stress with respective locations.