

Exponent®
Engineering & Scientific Consulting

Raj Pasumarthy

Associate | Vehicle Engineering
Austin
+1-512-634-2958 | rpasumarthy@exponent.com

Professional Profile

Mr. Pasumarthy's areas of expertise include the analysis and reconstruction of single vehicle and multi-vehicle crashes. He is experienced in conducting site and vehicle inspections, 3D laser scanning, Computer Aided Design and using simulation tools to investigate the kinematic and dynamics of automotive crashes. Mr. Pasumarthy has several years of professional experience in the automotive industry with OEMs such as General Motors, Hyundai Motors, and suppliers such as ArcelorMittal Tailored Blanks.

Prior to joining Exponent, Mr. Pasumarthy worked as a Product Development Specialist at ArcelorMittal Tailored Blanks and Project Engineer at Detroit Engineered Products. In these roles, his focus was mainly on optimizing the Body-In-White (BIW) structures to improve crash performance while minimizing cost and increased mass. He also became proficient in project planning and maintaining good relationships with multiple clients while meeting expectations.

Mr. Pasumarthy worked as a Vehicle Optimization Engineer at General Motors, and as a Vehicle Safety Research Engineer at Hyundai Motors where he focused on Vehicle structure development for crashworthiness. These roles gave him good exposure to the standard practices followed in the OEMs and working with large cross-functional teams that provided him an opportunity to work collaboratively while mentoring junior engineers.

Academic Credentials & Professional Honors

M.S., Engineering Management, Trine University, 2021

M.S., Mechanical Engineering, Auburn University, 2016

B.S., Mechanical Engineering, Jawaharlal Nehru Technology University, 2011

Prior Experience

Product Development Specialist, ArcelorMittal Tailored Blanks, 2019-2022

Account Manager & Project Engineer, Detroit Engineered Products, 2018-2019

Vehicle Optimization Engineer, General Motors, 2016-2018

Graduate Research & Teaching Assistant, Auburn University, 2014-2016

Research Engineer, Hyundai Motors, 2011-2013

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Publications

Presentations

Pasumarthy, R., Best practices for Battery Modelling - Fast, Comprehensive, Semi-automated tool sets 3DExperience Modelling and Simulation Conference by Dassault Systems, Detroit, MI / Sep 2019

Pasumarthy, R., Opto-Mechanical characterization of Ballistic Polymer Gel - stress concentration problems, loading rate dependency behavior. International Mechanical Engineering Congress and Exposition by ASME, Houston, TX / Nov 2015

Pasumarthy, R., Opto-Mechanical characterization of Ballistic Polymer Gel Graduate Research Showcase Poster Competition at Auburn University, Auburn, AL / Oct 2015