The BAJA SAE Series® is an event for the undergraduate engineering students, organized globally by the Society of Automotive Engineers, USA. The event originated in the name of Mini - BAJA, in the year 1976 at University of Carolina. Since then, the event has spanned across six countries – USA, Mexico, South Africa, Korea, Brazil and India. The BAJA SAE tasks the students to design, fabricate and validate a single seater four - wheeled off road vehicle to take part in series of events spread over a course of 3 days that test the vehicle for the sound engineering practices that have gone into it, the agility of the vehicle in terms of gradeability, speed, acceleration and maneuverability characteristics and finally its ability to endure that back breaking durability test.

I led the design of the university vehicle to compete in SAE India BAJA 2015, key responsibilities included:  
  
• Took responsibility for team formation and recruitment, Planned Design & Execution, Allocated resources and defined deliverables to sub-teams.  
• Chassis Design: Designed a tubular frame chassis complying with rules of the competition, and for stiffness and strength requirements for handling and safety.  
• Suspension Design: Designed double wishbone suspension-Front & Rear. Performed kinematics, handling, and structural analysis.  
• FEA: Performed structural analysis and optimization for chassis, suspension, and mounting components of the car to perform under conditions encountered in the competition.

Additional Details: <https://seelio.com/w/3rjg/chassis-suspension-design-sae-baja>