

All the renderings created for this project could not be uploaded into Sgore.com due to file size limitations. Please visit the following links to have a look at all the renderings and YouTube videos created for this project:
<https://gallery.autodesk.com/fusion360/projects/caeli---design-for-automotive> <https://www.behance.net/gallery/47943799/Caeli-Design-for-Automotive>? Please visit the following link to download the Fusion 360 model along with the Design History: <http://a360.co/2jrDjFT> Please visit the following link to see a video illustrating this model: https://youtu.be/gJPbnTCvmHc?list=PLPzgDmBPki258GTIcUEfJs2f_3v1g0r11 Please visit the following link to see the simulations performed on this model: https://youtu.be/PfJycXfLlk0?list=PLPzgDmBPki258GTIcUEfJs2f_3v1g0r11 Please visit the following link to see the animations created in Fusion 360 on this model: https://youtu.be/wrf7YVc-q1M?list=PLPzgDmBPki258GTIcUEfJs2f_3v1g0r11 Caeli is a concept F1 race car designed to achieve a subtle balance between a futuristic aesthetic look and a more practical, realistic design. Owing to this, the model can be incorporated into practical designs easily with minimal modifications. It consists of all the elements to realize the exterior of an F1 car, along with a highly detailed driver and a cockpit, essentially modelling everything except the components under the hood. The body of the car is an inspiration from many contemporary cars like the Spark Renault SRT and the Verizon IndyCar Series. The cockpit is positioned as close to the ground as possible to reduce the center of gravity of the car, reducing the chances of the car to slide or drift away. The driver rests on a carbon fiber seat, custom made for him to increase comfort and spatial efficiency. The driver uses a 4 point seat harness to ensure safety. The steering wheel makes almost all the controls available to the driver at his fingertips letting him have more time on the steering wheel and thereby increasing his control over the car. Fluid dynamics simulation has been performed on the car using Autodesk Flow Design to understand the air profile around the body. Turbulent wakes have been plotted behind the front wheels and the rear wings and the pressures on the car have been realized. These simulations allows us to make critical decisions on the body of the car to optimize the aerodynamic flow, one of the important feature which governs the downforce and thereby the grip of the car. High definition realistic images could be produced in a substantially less time due to rendering in Autodesk Fusion360.