SUKHRAJ HOTHI

Mechanical ENG.

Qualifications

- Proficient with SolidWorks, Rhinoceros surface modelling, rendering with Keyshot and post processing with Photoshop
- Extensive experience with rapid prototyping through SLA, SLS, and FDM 3D printing for professional presentation
- Project Management skills developed through co-ordinating product manufacturing trials in both mould injection and decorative finishing
- Experienced with material testing procedures for various interior automotive parts that would need to be tested for compression, adhesive strength, tensile strength, impact testing, and marring

Work Experience

Mitchell Plastics Decorative ENG. Intern Jan-Apr '16

- Worked within R&D department on conceptual interior products and parts for Toyota, FCA, and Ford
- Conceptualized and created new interior decorative designs through the use of industry production processes (eg. painting, hydrographic, wrapping, and laser etching)
- Knowledgeable with Injection Moulding and basic Tool Design from work with prototype plastic part design for R&D projects, for example the Dodge Ram tambour door project done during my last term

Current Projects

- Member of mechanical engineering team helping start up the Waterloo Autonomous Sailboat team, our objective is to build a autonomous sailboat which will compete against other university teams across Canada and America
- Prototyping a silicone sport wristband for the Apple watch which will meet Apple's design specifications for third party wristbands
- Working under the supervision of professor Behrad Khamsee on a new electromagnetic spherical wheel design which uses maglev propulsion to drive forward levitating wheels

Previous Projects

- Have run my own 3D Print service using my own FDM Printer completing orders for more than 70 clients, made a return on investment and now expanded to a new Form 2 SLA Printer
- Designed and built a 250cc Dune Buggy out of a steel chassis and developed skills in metal work, welding, automobile painting, and high strength 3D Printing
- Designed and built a all electric Segway made of a aluminum base chassis and powered by twin 12V lead batteries powering 300 Watt Scooter Electric Motors balanced by a 6 axis Analog Accelerometer Arduino Combo