Sarthak Vaish

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EDUCATION

Massachusetts Institute of Technology, Cambridge, MA

May '17

Masters in Mechanical Engineering, Sloan Automotive Lab - 4.4 GPA

Georgia Institute of Technology, Atlanta, GA

July '15

BS in Mechanical Engineering and Minor in Material Science and Engineering – 3.7 GPA

WORK EXPERIENCE

Sloan Automotive Lab, MIT

Graduate Research Assistant, Cambridge, MA

September '15 – Present

- Working under Dr. Tian Tian on both the simulation and experimental side of analyzing friction in the piston assembly of an internal combustion engine using a prototype Floating Liner Engine
- Developing new concepts of piston skirt profiles to help reduce oil consumption as well as reduce friction for performance engines
- Advising and mentoring an undergraduate researcher who assists with performing experiments

BMW Group

Product Integration Intern, Munich, Germany

January '14 – July '14

- Gained experience in the development process of doors and supported the product integration team for the new BMW X3 Series
- Coordinated the use of assembly concepts and standards between the plant in Spartanburg,
 SC and the vehicle development teams

MedShape Inc., Research and Development Department

Associate, Co-op Program, Atlanta, GA

Fall '12, Summer '13

- Gained experience in Research & Development of proof-of-concept and FDA submission for new ECLIPSE ® Soft Tissue Anchor. Participated in the commercial release of a new surgical procedure pack. ECLIPSE ® won the Silver Award for Medical Design Excellence
- Responsible for manufacturing and quality testing of ECLIPSE ® in support of it's commercialization

SKILLS Technical Proficiencies

Solidworks CNC Lathe, Mill CATIA V5 HSMWorks MATLAB Waterjet VBA

Communicative Proficiencies

- Proven competence in technical writing and delivering effective presentations.
- Fluent in English, German and Hindi
- Worked in Germany for 6 months and completed 3 semesters at Goethe Institut.

PROFESSIONAL EXPERIENCE

MIT Hyperloop

January '16 - Present

Member, Aero-structures / Frame team

- Part of a 30 member team that won the design competition for SpaceX and Elon Musk's concept of Hyperloop
- Performed analysis using FEA tools in Solidworks for the pod frame
- Manufactured a mold and made a carbon fiber shell for the pod using the resin infusion technique

Georgia Tech Motorsports

Chief Engineer, F2015

August '11 - May '15

- Principal Leader of the Formula SAE team at Georgia Tech. Led the team to a Top 15 finish in the Design category amongst 120 teams
- Responsible for developing the entire race car and managing a team of over 45 students divided into 7 different sub-systems
- Helped the team members go from part design to analysis to manufacturing and testing for over 1000 individual parts
- Assisted team with the design process: reviewed, improved designs and integrated all the subsystems including a top level analysis on vehicle

Uprights and Hubs Lead, Suspension Subsystem

May '13 – April '14

 Designed and developed uprights and hubs for a racecar and manufactured them using a CNC mill/lathe. Iterated through the design to reduce weight and improve stiffness.

Mentor Jackets August '15 – Present

Guiding 2 students at Georgia Tech and helping them build their resumes and network with leaders in their respective fields