Sarthak Vaish

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9 Seckel Street, Unit 1, Cambridge, MA 02141

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, Cooperative Plan, Highest Honors – **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; providing industry sponsors with experimentally proven simulation tools for design
- 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
- Performed in manufacturing and quality testing of ECLIPSE ® in support of it's commercialization

SKILLS

Technical Proficiencies
Solidworks CNC Lathe & Mill CATIA V5 HSMWorks MATLAB Shop Tools VBA

Communicative Proficiencies

- Proven competence in technical writing and delivering effective presentations
- Fluent in English, Hindi and German (completed 3 semesters at Goethe Institut)

LEADERSHIP 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
- Oversaw the development of the entire race car and managed a team of over 45 students divided into 7 different sub-systems
- Aided 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 sub-systems 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
Advisor

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