Samir M. Mehta

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Education

Thayer School of Engineering at Dartmouth College

Hanover, NH

Bachelor of Engineering Concentration: Mechanical Engineering

GPA: 3.45/4.0

June 2012

Relevant Coursework: Solid Mechanics, Systems, Statistical Methods, Machine Engineering, Electronics: Linear and Digital, Introduction to Operations Research, Engineering Design Methodology, Computer Aided Design, Thermodynamics, Structural Analysis, Science of Materials

Dartmouth College Hanover, NH

Bachelor of Arts Major: Engineering Sciences modified with Economics GPA: 3.10/4.0

August 2011

Minor: Chinese

Shanghai Jiao Tong University

Shanghai, China

• Deepened my prior language skills for Mandarin Chinese by immersing myself in the native culture for two terms

September 2010 - June 2011

Academic Project Experience

Twist Car Competition, Computer Aided Design

Spring 2012

- Designed and built a vehicle with coupled steering and propulsion to compete in a race
- Utilized SolidWorks to model weldments, conduct simulations on key components, and create technical drawings for machining
- · Awarded most innovative design for the arm powered linkage propulsion system used while placing second in the competition

Senior Design Project, Engineering Design Methodology

Fall 2011 - Winter 2012

- · Contracted by a Dutch firm to investigate increased efficiency propulsion systems for maritime vessels
- Conducted extensive research on the current state of the art, performed substantial market research, and determined the economic viability of a novel propulsion system
- Analyzed the hydrodynamic efficiency of the device using FLUENT and constructed a working prototype to validate results
- Programmed an Arduino microcontroller to interface with shaft encoders and stepper motors to achieve the desired motion of the prototype
- Worked effectively in a team to meet strict project deadlines while updating the client with the ongoing progress of the project
- Presented our progress and final results to a review board of Professional Engineers

Remote Controlled Vehicle, Machine Engineering

Fall 2009

- Designed, machined, and assembled a gear train driven vehicle to relocate stacks of hockey pucks from one side of a large barrier to the other
- · Used Pro/Engineer to model the design and followed proper drafting practices to create technical drawings of each component

Work Experience

Magna Electronics, Mechanical Engineering Intern

Zhangjiagang, China June 2010 - August 2010

- Used Catia to model various components of driver assistance and safety systems
- Assisted in the construction and testing of prototypes

Zytech Solar, Assistant to Head Engineer

Qingdao, China

• Modeled off-grid solar panel systems, such as solar streetlights, using Pro/Engineer

May 2009 - August 2009

Hand Surgery Associates, Doctor's Assistant

Birmingham, MI

• Gained valuable communication skills by interacting with and handling a diverse group of patients

June 2007 – August 2007

Leadership

Kappa Kappa Fraternity, Athletic Coordinator

March 2008 - June 2010

• Organized intramural sports games and athletic events

Drug and Alcohol Peer Advisor (DAPA)

June 2008 - June 2010

• Acted as a health opinion leader, resource to my peers, and ambassador to the Office of Alcohol & Other Drug Services (AODS)

Dartmouth Varsity Squash Team, Community Service Representative

September 2006 – June 2008

Skills and Hobbies

CAD: SolidWorks (CSWP), Pro/Engineer, Catia

 $\textbf{Programming:} \ Matlab, Arduino, R$

Software: SpaceGass, Excel, PowerPoint, Word, iMovie, Ableton **NH State Board of Professional Engineers:** Passed FE exam

Language: Intermediate/Advanced ability in Mandarin Chinese

Machine Shop: Lathe, Mill, Drill Press

Hobbies: Squash, Table Tennis, Badminton, Cello, Traveling the

world (visited 15 countries in 5 continents)