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Education	Massachusetts Institute of Technology Candidate for Bachelor of Science in Mechanical Engineering Prior Relevant Coursework: Mechanics and Materials I, Differential Equations, Intro to MATLAB, E&M Current Relevant Coursework (Fall 2011): Mechanics and Materials II, Dynamics and Control I, Thermal-Fluids Engineering I, Electronics for Mechanical Engineers The Charter School of Wilmington Valedictorian in class of 232 students <i>Joint enrollment with the University of Delaware: Multivariable Calculus, Ordinary Differential Equations</i>	Cambridge, MA Jun '14 Jun '10
Research Experience	Summer Undergraduate Researcher, Dept. of Mechanical Engineering, University of Delaware <i>"Design and Characterization of a Novel, Energy Efficient, Flapping-Wing MAV with Asymmetric Flapping Inspired from Thorax of Small Diptera"</i> <i>Under Dr. Sunil Agrawal and Graduate degree candidate Joon Park</i> <ul style="list-style-type: none">• Optimized the two layered mechanism for an asymmetrically flapping micro air vehicle (MAV) using MATLAB• Second author for conference paper that will be submitted to the IEEE International Conference on Robotics and Automation (ICRA) in September 2011 Senior Research Project, Dept. of Food Science, University of Delaware <i>Under Dr. Haiqiang Chen and Graduate degree candidate Hudaa Neetoo</i> <ul style="list-style-type: none">• Investigated the effects of using 3 edible, chitosan-based antimicrobial coatings to enhance the safety of ready-to-eat foods using bacterial culture, vacuum packaging, and statistical analysis Research Assistant, Dept. of Physical Therapy, University of Delaware <i>Collaboration between Departments of Physical Therapy and Mechanical Engineering</i> <i>"The Utilization of Mobility for Socialization in Children with Special Needs"</i> <i>Under Dr. Cole Galloway and Graduate degree candidate Christina Ragonesi</i> <ul style="list-style-type: none">• In a team of 4 high school students, observed the effects of independently controlled robotic locomotion on socioemotional development in a non-typically developing toddler with limited mobility• Collected data and video footage, worked closely with UD undergrads and graduate students to perform analysis using the Howes Peer Play Scale, reported and troubleshooted robot design and mechanical issues• Fifth author for abstract presented at the 2010 International Conference on Infant Studies (ICIS) in Baltimore, MD	Newark, DE May '11-Aug '11 Newark, DE Jul '09-Jun '10 Newark, DE Jun '09-Sept '09
Employment	MathPlus Program, Hockessin, DE <i>Teaching Assistant</i> <ul style="list-style-type: none">• Individually mentored and instructed 50+ K-12th graders on Program homework and math problems	Aug '00-Aug '10 Aug '06-Aug '10
Leadership	MIT Association of Taiwanese Students (ATS) <i>Social Chair</i> <ul style="list-style-type: none">• Work with other executive board members to coordinate 7-10 campus-wide events per semester to promote appreciation and knowledge of Taiwanese culture• Event captain for 2011 Lunar New Year Festival: coordinated 25+ volunteers to provide 23 different traditional, home-cooked dishes for 100+ attendees• Event captain for 2011 Strait to Taiwan Event: coordinated 35+ volunteers to transform the MIT Stata Center into a Taiwanese day market for 1000+ participants	Sept '10-Present Dec '10-Present

Chinese American Community Center Folk Dance Troupe, Hockessin, DE

Sept '97-Jun '10

Head Teaching Assistant

Sept '07-Jun '10

- Led 20+ dancers (age 8-18) and other TA's through weekly rehearsals and monthly performances
- Coordinated dances and edited music for events and performances, implemented a streamlined organization system for audio and visual media
- Past performance venues: 2009 Macy's Thanksgiving Day Parade (NYC), National Theatre (Washington D.C.), Kennedy Center (Washington D.C.)

Skills

Language: Conversational Mandarin

Computer: MATLAB, Microsoft Word, PowerPoint, and Excel

**Awards &
Recognition**

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| • United States Presidential Scholar | 2010 |
| • Siemens Award for Advanced Placement | 2010 |
| • National Merit Scholarship Recipient | 2010 |
| • Society of Women Engineers (SWE) Del Mar Peninsula Scholarship | 2010 |