School Address:
70 Pacific St., Apt #841A
Cambridge, MA 02139

Michelle Lustrino

lustrino@mit.edu
(914) 319-4840

Home Address:
69 Jennifer Ct.
Yorktown, NY 10598

Education

MASSACHUSETTS INSTITUTE OF TECHNOLOGY — **Cambridge, MA**

- **Candidate for Master of Science in Mechanical Engineering**, *February 2011. Current GPA: 4.8/5.0*
- **Bachelor of Science in Mechanical Engineering**, Minor in Management. *June 2009. GPA: 4.7/5.0*
  - Member of Pi Tau Sigma Mechanical Engineering Honor Society, Initiated December 2007
  - Member of Tau Beta Pi Engineering Honor Society, Initiated February 2009

Experience

MIT LABORATORY FOR MANUFACTURING AND PRODUCTIVITY — **Cambridge, MA**
RESEARCH ASSISTANT, ***September 2009 - present***

- Developing an innovative, high-yield thermal bonding process for microfluidic applications
- Conducted feasibility study for potential processes, including material & thermal analyses and prototyping
- Currently working on detailed analysis of processing parameters and device design for a method that shows potential for improvement in yield and robustness over current bonding methods

BOEHRINGER INGELHEIM PHARMACEUTICALS, INC. — **Ridgefield, CT**
SUMMER INTERN, HIGH THROUGHPUT SCREENING GROUP, ***June – August 2006 – 2008***

- Engineered an innovative laboratory instrument prototype based on customer needs; interfaced mechanical design with necessary electronics and automation; established operational protocols and conducted training sessions
- Designed a new tool for a laboratory process; tool resolved ergonomic issues, decreased process time by 85%, and saved department $4500
- Scaled down dimensions and design components for previously developed lab equipment; built second system
- Conducted detailed testing and analysis to evaluate performance of a newly proposed microplate material; results were used to make commercial commitments
- Successfully developed an interactive electronic service request tracking system based on user requirements
- Designed chiller blocks for effective cooling of reagents

MIT MANUFACTURING AND PROCESS CONTROLS LABORATORY — **Cambridge, MA**
UNDERGRADUATE RESEARCHER, ***September – June 2006 – 2009***

- Developed LabView program, designed and built mechanical components, and researched lab equipment needed to better characterize temperature control valves; executed control valve characterization
- Implemented new hardware and developed a non-linear controller to correct backlash in the main control valves

5 WITS PRODUCTIONS — **Saugus, MA**
EXTERN, ***January 2008 (one-month-long extern program)***

- Designed and prototyped interactive elements and special effects for a walk-through spy-themed adventure

Academic Projects

ARTICULATING TOOL FOR ENDOSCOPIC SCREW DELIVERY
September - December 2009

- Engineered this novel tool as a part of a precision machine design class focusing on medical devices
- Worked with team of engineers and partnering surgeon to develop device requirements
- Completed engineering analysis and built prototype for functional testing
- Technology is patent pending

PORTABLE ELECTROMECHANICAL BRAILLE LABEL MAKER
September – December 2008

- Engineered an innovative electromechanical Braille label maker on a team of 15 students with a $6,500 budget
- Worked on idea development, design of precision mechanical components, final assembly, and troubleshooting
- Chosen as task force leader during crunch time to ensure critical module functioned by final deadline
- Technology is patent pending

Skills

Introduced to and basic experience with the following: Lathe and Milling Machine, Waterjet, Thermoforming, Injection Molding, SolidWorks, Electronic Circuits, FEA, LabView, MATLAB, Java programming

Leadership

- **MIT Society of Women Engineers (SWE)**
  - Outreach Co-Coordinator, *January 2006 – December 2007*
- **MIT Edgerton Center, MIT Public Service Center**
  - Outreach Assistant, Mentor and Activity Leader, *September 2005 – September 2007*