

## Education

### Franklin W. Olin College of Engineering, Needham, MA.

Degree Candidate: B.S. Engineering: Systems (2010); GPA 3.24/4.0; Awarded Full Tuition Olin Scholarship

- **Design:** Design Nature, User-Oriented Collaborative Design, Product Design and Development, Design for Manufacture
- **Engineering:** Microelectronic Circuits, Mechatronics, Signals and Systems, Thermodynamics, Systems, Software Design, Heat Transfer & Fluid Dynamics, Senior Capstone Project in Engineering, Mobile Application Development
- **Fine Arts & Other:** Drawing I, Figure Drawing\*, Painting II\*, Black and White Photography\*, Anthropology, Foundations in Business

### Santa Reparata International School of Art, Florence, Italy.

Study abroad program in fine arts: Fall 2008. Courses taken at SRISA are indicated above by a \* symbol.

- Had four pieces of artwork in three different media juried into city-wide art exhibition.

### Millis High School, Millis, MA.

Valedictorian (Class of 2006); National Merit Scholar; AP Scholar with Distinction

## Skills

**Computer:** Adobe Creative Suite, Solidworks, MATLAB, Simulink, COMSOL, Python, HTML, Mac and Linux familiarity, QA

**Creative:** Internationally-featured artist; darkroom experience; interviewing, transcription, and user studies experience

**Mechanical:** Drill Press, Belt Sander, Horizontal and Vertical Bandsaws, Heat Press, Sheet Metal Press

**Language:** Some Spanish (7 years of study), basic Italian

## Experience

**Team Grill** (*under NDA*) Senior Capstone Project in Engineering Fall 2009- Spring 2010

- Appointed technical lead for twofold engineering capstone project sponsored by Team Grill, a company specializing in the sales of high-end outdoor grills branded with sports team logos.

- Currently developing solutions for child-safe grills and mass customization techniques for grill hood decoration.

**PureBlue Water Fountain** Product Design and Development Fall 2009

- Worked as technical lead on team composed of students from Rhode Island School of Design, Olin College, and Babson College.

- Created works-like, looks-like, and alpha prototypes of a drinking fountain designed to fit within a college atmosphere.

- Performed user research through observation and interviews for both primary and secondary stakeholders.

**Design for Art Gallery Directors** User-Oriented Collaborative Design Spring 2008

- Designed for art gallery directors in a semester-long project culminating in a product/service proposal.

- Interviewed, observed, and co-designed with gallery directors.

- Held biweekly design reviews, as well as biweekly design methodology quizzes.

**Automated Graffiti Plotter** Principles of Engineering Fall 2007

- Worked in a self-directed team to design and construct a graffiti plotter with non-linear controls.

- Given responsibility for mechanical design, fabrication, and motor control software (Python).

- See <http://rolocroz.com/wallrus> for more information.

## Employment

**Software Development Co-Op** IBM- Cambridge, MA Summer 2009

- Worked in Quality Assurance for Lotus Connections Plug-Ins group for both Windows and Linux systems.

- Received the highest attainable marks on final intern review, along with two awards for outstanding team contributions.

- Invited to take on additional projects and mentoring in usability, user experiences, and interface design.

**Creative Consultant** Lux Scientiae- Norwood, MA Summers 2007-2008

- Produced graphics, web layouts, and sales items.

- Took initiative to suggest and develop new features for software releases.

- Wrote, updated, and reorganized help documentation to improve usability.

## Interests

- Art, cooking, singing, performing, photography, traveling, rugby, and good literature.