

# Joseph Carrow

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## Experience

**World Energy Labs**, Mechanical Engineer *San Francisco, California* [Aug. 2004 – present]

- Designed for low-to-medium volume manufacture, including sheet metal, milled plastic, and cable assemblies.
- Built multiple mechanical models, including proofs of concept and in-house tools.
- Reduced material cost on key product accessory by 75 per cent with redesigned standard component.
- Altered LCD mount to reduce assembly time by 35 per cent.
- Standardized functional test process of product, reducing test time by 2.5 hours per unit.
- Managed design of premium product accessory with third party engineering design firm. Coordinated feedback from Sales and Marketing, and Electrical Engineering departments.
- Troubleshoot electronic instrumentation and test equipment.
- Created and maintained manufacture and assembly procedures for scientific test instrument.
- Functioned as liaison between customer technical support and engineering department.

**RPI Tau Beta Pi Competition**, Independent Entrant *Troy, New York* [Spring 2003 / Spring 2004]

- Conceived and fabricated original egg drop vehicle under time and material constraint regulations. Placed first among approximately 50 engineering students in 2003.
- Constructed new egg drop vehicle judged by weight, flight time, payload, and accuracy of touchdown. Placed first in 2004.

**Architecture for Humanity Mobile AIDS Clinic Contest**, Team Leader *New York, New York* [Fall 2002]

- Designed alternative to mobile AIDS clinic; presented plan in visual and written format.
- Received honorable mention and display in Architecture for Humanity exhibit among a collection of 600 entries representing professional architects and industrial designers from 60 countries.

## Education

**Rensselaer Polytechnic Institute** *Troy, New York* [Aug. 2000 – May 2004]

- Bachelor of Science, Mechanical Engineering & Science, Technology, and Society Studies
- Senior capstone project: “Professional tools for amateurs.” Designed low budget bullet-time camera system and an acoustically augmented bass drum.
- Phi Sigma Kappa, Gamma Tetarton Chapter, 2001.

Positions held: Secretary, Scholarship Chair.

## Skills

- Certified Solidworks Professional, experience in sheet metal, design for molding, creation of assembly and detail drawings; version control in Microsoft Visual Source Safe and CVS.
- Electronic instrumentation with knowledge of battery systems and analog electronics.
- Prototyping and analysis in Labview, Matlab, and C.
- Digital photography and imaging in Adobe Photoshop, rendering and animation in Cinema 4D.
- Microsoft Office Suite including advanced use of Excel.

## Hobbies and Interests

- Electronics
- Acoustics and vibration
- Drums and percussion
- Tools for human ability