

Dustyn Paige Roberts

200 W 18th St, Apt 2E, NY, NY 10011
dustyn@alumni.cmu.edu
201.452.1583

- EXPERIENCE**
- 4/09 to present **Dustyn Robots** (www.dustynrobots.com)
Sole Proprietor: Freelance Mechanical Engineering, Design, and Biomechanics
Author of upcoming book "Making Things Move: DIY Mechanisms for Inventors, Hobbyists, and Artists"
Atair Aerospace (atair.com) – Design, fabricate, and assemble guided parachute systems
KAMmetal (kammatal.com) – Created 3D models of furniture concepts for fabrication
The Center for Podiatric Care and Sports Medicine (healingfeet.com) – Clinical gait analysis
Aniteal Labs (aniteal-labs.com/ worldmedicaltech.com) – Modeled prototype infant incubator
VocalLock (vocallock.com) – Developed and 3D printed electromechanical lock-box prototypes
Solar One (solar1.org) – Designed and built mobile solar charging station
Global Biomechanical Solutions (injuryforces.com) – Prepared expert witness reports
- 1/07 to present **NYU Tisch School of the Arts - Interactive Telecommunications Program** New York, NY
Adjunct Associate Professor of Communications
- Creator of and instructor for class "Mechanisms and Things That Move"
- 1/06 to 3/09 **Honeybee Robotics** (www.honeybeerobotics.com) New York, NY
Project Engineer, Project Manager & Systems Engineer
- Directed development and design of lunar regolith analysis tool with Goddard Space Flight Center
- Supported functional and environmental test efforts for a NASA sample manipulation system (SMS)
- Designed harness, flex circuit, switches, and several mechanical components for SMS
- Managed integration of mechanical and electrical assembly for SMS
- Supported various proposal efforts for NASA, DOD, DARPA, NIH, and industrial clients
- Fabricated, harnessed, and assembled a subcomponent of the inchworm deep drilling system
- Acted as lead technical consultant for art installation accident at the Moscone Center, San Francisco
- 9/08 to 12/08 **Assistant Program Manager** Perth, Australia
- Co-located with major mining client to support field operations and technology development
- 11/04 to 12/05 **Design Engineer**
- Conceptualized and modeled the Inchworm Deep Drilling System for interplanetary applications
- Modeled and developed components of SMS from prototype through fabrication and integration
- 9/03 to 9/04 **Center for Biomedical Engineering Research** (www.cber.udel.edu) Newark, DE
Research Assistant, advised by Dr. Thomas Buchanan
- Directed all aspects of muscle geometry thesis research, scheduling, subject testing, and analysis
- EDUCATION**
- University of Delaware** Newark, DE
MS in Biomechanics & Movement Science, August 2004
GPA: 3.8/4.0
- Carnegie Mellon University** Pittsburgh, PA
BS in Mechanical Engineering, double major in Biomedical Engineering
Minors in Robotics and Manufacturing Management & Consulting
Graduated May 2003 with University, Department, and Research honors
GPA: 3.6/4.0
Select Coursework: Integrated Product Development, Electromechanical Systems, Robotics
- AWARDS**
- NASA Tech Briefs award – Lunar Dust Tolerant Connector 3/09 (Patent #61/158,933)
NCAA Division III Varsity Women's Volleyball All-Academic recognition (1999-2003)
Judith Resnik Challenger Scholarship for Women (1/2 tuition for 4 years)
- SERVICE**
- Engineers Without Borders (4/08 to 9/08)
Al DuPont Hospital for Children inpatient rehabilitation gym (1/04 to 8/04)
- SKILLS**
- Computer: Autodesk Inventor, Solidworks, ANSYS Workbench, Adobe Photoshop, Matlab
Equipment: Machine shop tools (lathe, mill, band saw, drill press, grinder), hand tools, soldering
Languages: Conversant in Spanish
- ACTIVITIES**
- 2003 Pittsburgh Marathon runner (4:29:28)
Cast Member, "Battle of the Geeks" pilot show, filmed in Namibia, Africa May 2006
Snowboarding, scuba diving, traveling, helping artists create kinetic work, teaching