## RED CRAVESJOB

HB 1111

Hanover, NH 03755

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## **EDUCATION**

## Dartmouth College, Hanover, NH

March 2008

Bachelor of Arts in Engineering Sciences modified with Environmental Science

Major GPA: 3.22/4.0

Relevant Course Work: Thermodynamics, Systems, Discrete Probability, Linear Algebra, Differential Equations, Multivariable Calculus, Vector Calculus, Mechanical Physics, Electricity and Magnetism, Chemical Process Engineering, Environmental Engineering, Real Analysis, Numerical Analysis, Environmental and Ecological Economics, Sustainability and Resource Management

## Tolland High School, Tolland, CT

June 2004

GPA: 4.0/4.0

Member of the National Honor Society, Junior Engineering Technical Society, Volunteers in Service in Our Neighborhood program, Assistant to the Athletic Director

## **EXPERIENCE**

**Green Strategies Inc,** Washington, DC – *Environmental Consulting Intern* March 2007- September 2007

- Researched imperative environmental issues with an emphasis on climate change by attending Senate and House hearings in addition to a variety of other methods.
- Conducted all research for and completely designed a course called The Law of Climate Change to be taught at Harvard Law School by Roger Ballentine in the winter of 2008.
- Wrote briefings for clients such as Wal-Mart and the use of the company.

## Dartmouth College, Hanover, NH - Research Intern

March 2006- March 2007

- Worked on independent research project in the Department of Computer Science under Professor Bailey-Kellogg.
- Performed computational analyses on known biological data to suggest targets for further experimentation on protein complexes and their structures.
- Utilized Python, Bio -python, XML, and BLAST, practiced different research ing techniques, and exercised analytics skills to develop methods to attain project goals.

## Thayer School of Engineering, Hanover, NH - Tour Guide

June-August 2006

Led groups of 2-30 people including prospective and incoming students with an interest in
engineering sciences through a tour of Dartmouth College's engineering program and extensive
laboratory facilities.

## **Dartmouth College**, Hanover, NH – Swim School Instructor

2004- Present

• Volunteered over fifty hours of individualized instruction to children ranging in ages of 3-12 with a focus on assimilation to the water.

## **LEADERSHIP**

## **Division I Varsity Swim Team**

2004-Present

• Utilize excellent time management skills to balance challenging engineering courses with an athletic commitment to swimming of over 20 hours per week of practice time.

## Varsity Cross Country Captain

2003

• Led team to 20 victories by developing strong teamwork, effective communication and strategic winning methods. Inspired teammates to perform beyond expectations against strong competitors.

## TECHNICAL SKILLS

**Computer Languages:** C, C++, Java, MATLAB, Python/Bio -Python, HTML, BLAST, Pascal, Maple, Visual Basic/Windows Programming

**Technical:** Electrical Systems, Mechanical Systems, Solid Mechanics

Computers: Knowledge of PCs and MACs, Microsoft Office, Microsoft Access, Stella

#### **Ed Venture**

8000 Cummings Hall ♦ Hanover, NH 03755 edwardo.too.venture@dartmouth.edu

#### **EDUCATION**

## Thayer School of Engineering at Dartmouth College, Hanover, NH

7/08

- Bachelor of Engineering with concentration Mechanical Engineering. 3.22/4.0 GPA
- Coursework Includes VHDL, CAD modeling, Statistics and Probability, Engineering Design Methodology, Sustainable Design, Industrial Ecology, Manufacturing Design Management, Structural Analysis, Solid Mechanics
- Six Sigma Greenbelt Certified, Teaching Assistant (Citation Awarded), Abbot Technology Leadership Program

#### Dartmouth College, Hanover, NH

7/07

- Bachelor of Arts in Engineering Sciences modified with Economics. 3.09/4.0 GPA. 3.1/4.0 Major GPA (19 courses).
- Coursework includes Systems Signal Processing, Operations Management, Digital Electronics, Programming in Java, Industrial Ecology, System Dynamics, Solid Mechanics, Thermodynamics, Product Design, Statistics, Corporate Finance

#### **TECHNICAL EXPERIENCE**

## Vehicle Dynamics Team Member, Dartmouth Formula Racing, Hanover, NH

9/07 to current

- Designing, modeling, simulating, constructing and testing of innovative suspension design for FSAE racecar
- Responsible for purchasing all parts and preparing cost analysis reports
- Preparing proposals, progress reports and presentations to review panel

#### Sustainable Design, Dartmouth College. Hanover, NH/Lebanon, NH

1/08 to current

- Researching site and stakeholder analysis for 250 acre residential and commercial development in Lebanon, NH
- Designing and implanting energy, conservation and wastewater specifications for net-zero sustainability

## Biomedical, Electro-physiology Research Assistant, Johns Hopkins School of Medicine

Department of Otolaryngology/Biomedical Engineering. Baltimore, MD

7/06 to 9/06

- Conducted research in degenerative hearing loss and timing sensitivity loss in the mice model
- Operated surgical procedures in order to record electrophysiological measurements of the compound action potential (CAP) in various mice strains

#### LEADERSHIP EXPERIENCE

Head Teaching Assistant, Engineering Sciences 3, Substance of Civilization; Dartmouth College

6/07 to 9/07

- Facilitated everyday operations for course with 231 students
- Led study sessions, gave make-up lectures, led final review sessions, recorded attendance, graded, created solution manuals, developed final exam questions, videotaped lectures, and supervised other teaching assistants
- •Oversaw and addressed all students' queries and course issues

## Program Coordinator, Abbot Technology Leadership Program. Hanover, NH

8/07 to current

- Planning and coordinating events for distinguished guest speakers at Dartmouth College
- Promoting campus awareness and student involvement

#### Associate Salesman, Manager Assistant, Watson's of Indianapolis. Indianapolis, IN

11/01 to 1/07

- Sold over \$1 million dollars in product through personal customers sales
- Coordinated with management in purchasing and pricing of product while maintaining showroom

## Acting Program Secretary, Incentive Mentoring Program, Dunbar High School, Baltimore, MD

7/06 to 9/06

- Assisted students at completing over 250 college applications
- Supervised career fairs and mentor recruiting

## Pitcher, Dartmouth Varsity Baseball, Dartmouth College. Hanover, NH

9/03 to 2/05

- Developed team communication and relationship skills
- Maintained an intense daily workout routine
- · Awarded Varsity Letter during first year

#### **SKILLS**

- Extensive experience with MATLAB and Pro-Engineer
- Experience with computer applications software, Photoshop and graphics software
- Experience with VHDL, JavaScript
- Extensive management and team leadership experience, including program coordination and sales experience

# **Eve O'Lution**

Dartmouth College HB 8000 Hanover, NH 03755 912.111.8677 eve.olution@dartmouth.edu 14 Hills Lane Churit, NH 11333

#### **Education**

## Thayer School of Engineering at Dartmouth College - Hanover, NH

- Expected Master of Engineering Management and Bachelor of Engineering in Mechanical Engineering in December 2007
- Dartmouth Society of Engineers Fellow 2006, Certified Six Sigma Green Belt

## Dartmouth College - Hanover, NH

June 2006

• Bachelor of Arts, cum laude and with Honors in Major, Engineering Sciences, French Minor, GPA: 3.6/4.0

#### Horae Grev High School - Cha, NY

June 2002

• Cum laude, National Merit Scholar Commendation, Captain Varsity Ice Hockey Team; IBM Math Student of the Month

## **Work Experience**

## Lockheed Martin Space Systems - Engineering Intern - Sunnyvale, CA

Summer 2006

Designed, planned, and implemented a priority ordnance test for Fleet Ballistic Missile program. Evaluated replacement possibilities for detonators used in Linear Ordnance System test lines leading to potential savings of ~\$500k over life of program. Developed design concepts for internal R&D project for a new missile.

## Mercer Oliver Wyman - Consulting Intern - NYC, Chicago

Winter 2005

Worked for Global Strategic IT practice on project for client hedge fund. Worked with fund executives to formulate and propose strategic plan for reorganization of IT infrastructure to support cross-asset class products and new asset classes and instruments.

## **Standard & Poor's** – Credit Market Services Intern - NYC

Summer 2003

Compiled customized credit research reports. Assisted customers with credit research via telephone. Managed customer databases, including all Bloomberg CreditWire accounts. Attended analyst meetings to learn about the credit analysis process.

## Bicycle World - Mechanic and Salesman - Mt. Kisco, NY

Summer 2002

Repaired, assembled and sold road bikes, mountain bikes and cycling accessories.

## Mary Chapin Carpenter 2001 U.S. Concert Tour – Production/Tour Assistant Sum

mer 2001

Managed and accounted for all tour merchandise, assembled and operated on-stage teleprompter nightly. Assisted in set-up of production office and audio equipment. Created and distributed nightly set lists.

## **Independent Web Design** – Designer, Webmaster, IT Consultant

1997-Present

Created web sites and provided IT consulting and support for clients ranging from a Venture Capital firm to sports teams.

#### **Academic Engineering Project Experience**

(see 'http://www.dartmouth.edu/~eolution for more detail)

## **Dartmouth Formula Racing, Hybrid** (team project)

Winter 2007

Currently working to design, fabricate, and implement an optimized suspension system for a Formula style Hybrid race car, to be entered into student competition in the spring. Also responsible for all aspects of vehicle dynamics.

## **Honors Thesis: Commercialization of a Product** (individual project)

Spring 2006

Invented new type of bicycle stand for use when kickstands are undesirable. Completed an Honors Thesis to develop prototypes and thoroughly investigate all aspects of product commercialization potential.

#### Remote Controlled Trash Collection Vehicle (team project)

Fall 2005

Modified a remote control car kit to implement robotic arm and modified gearbox. Designed all components using ProEngineer.

#### **Digital Chutes and Ladders**® (team project)

Designed electronic version of board game Chutes & Ladders® using an LED matrix and a programmable logic chip (VHDL).

## **Skills & Accomplishments**

- Holder of US Patent (No. 9,999,333) for invention of new type of bicycle stand.
- Experience with machining, failure analysis, SEM. Lockheed Martin certified to assist work with explosives.
- Expertise in MS Office. Experience with Pro-Engineer, Pro-Mechanica, I-DEAS, MATLAB, VHDL, VBA, Java.
- Studied abroad in Paris Fluent in French

#### **Interests & Activities**

- Dartmouth Rugby five-year player and officer. Humanitarian Engineering Leadership Projects, Green Key Concert Chair,
- Professional jazz pianist Perform regularly in local venues both solo and as a combo leader. Skiing, cycling, hiking.

# Al Gore-Rythim

Dartmouth College • Hinman Box 8000 • Hanover, NH 03755 • 603-111-2211 al.go-rythim@dartmouth.edu

Education

## Dartmouth College, Hanover, NH

Bachelor of Arts in Engineering Sciences

June 2008

Major GPA: 3.6/4.00

•Course work includes: System analysis, ordinary and partial differential equations, product development, and computer programming.

## Project Experience

## Dartmouth College, Hanover, NH

Independent Research Project: Development of CASPER

Winter Term 2007

Code Analogous Structured Programming Environment Representation

- •Investigated new methods in visually demonstrating concepts taught in computer science within a 3D virtual environment. Utilized Java and Java 3D to produce a demo that provides visualizations for conceptualizing matrices of more than three dimensions and assessed effectiveness of approach.
- •Current Project URL: http://caspercode.fateback.com/index.html

#### Thayer School of Engineering, Dartmouth College, Hanover, NH

Research Assistant: Dr Lee Lynd's Lab

Fall 2006

•Maintained several steady-state reactor experiments on yeast in order to find an economically viable method to synthesize ethanol from carbon sources for bio-fuel production.

#### Dartmouth College, Hanover, NH

Developed Breath Control Musicality Trainer (Co-inventor), Patent Pending

Spring 2005

•Worked with a team of engineers on product development and prototyping an inexpensive and accurate airflow meter to aid wind musicians in enhancing their breath control. Participated in all steps of the design process.

WORK	Experience
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## Duke University, Department of Biology, Durham, NC

Research Assistant: Dr. Rob Jackson's Lab

Summer 2007

•Processed NASA MODIS albedo data for analysis of ecological succession in tandem with LIDAR and conducted a land cover validation of several sites in North Carolina with LANDSAT, AVHRR, and MODIS data. Alerted ORNL DAAC to possibly flawed data in their blue-sky albedo processing algorithm.

•Current Project URL: http://www.duke.edu/~bac12/

#### **Duke University, Department of Biology, Durham NC**

Lab Assistant: Dr. Robert Jackson's Lab

Summer 2005

•Extracted, processed, and analyzed soil samples for elemental analysis as a part of the Free-Air  $C0_2$  Enrichment Project. FACE is a nationwide program to develop technology that allows ecosystems to be exposed to elevated levels of carbon dioxide under fully open air conditions.

#### **Duke University,** Department of Biology, Durham, NC

Lab Assistant: Dr. Kathleen Smith's Lab

Summer 2004

•Maintained a colony of 75 opossums for embryological research, specifically role of somitogenesis in development.

## SKILLS & Interests

- •Computer Languages: ANSI C, MATLAB, Java, Java3D, Scheme
- •Computer Software: Microsoft Office, Maple, Sony Vegas Video, ArcGIS, Erdas IMAGINE, Linux, Adobe Photoshop, Adobe Dreamweaver, Adobe Fireworks, Nvu, Eclipse IDE, Codewarrior IDE
- •Interests: exercise, guitar, creative writing, meditation, website development

# Juana Bea

Thayer School of Engineering • 8000 Cummings, Hanover, NH 03755 • (603) 333-4444 • Juana.Bea@Dartmouth.edu

#### **EDUCATION**

I hayer School of Engineering, Fetw qwy Eqngi g Hanover, NH	
Master of Science, Biomedical Engineering	June 2008
Engineer-in-Training #0000, NH State Board of Professional Engineers	June 2007
Bachelor of Engineering, Mechanical Engineering, GPA: 3.33	June 2007
Bachelor of Arts, Engineering Sciences with Honors (major) and Film Studies (minor), GPA: 3.47	June 2006

Relevant Coursework Includes: Solid Mechanics; Structural Mechanics; Dynamics; Machine Design; Product Initiation and Completion; Material Science; Mechanics of Materials; Biomaterials; Tribology; Computer Aided Mechanical Design; Technology Project Management; Senior Honors Thesis; Thermodynamics; Chemical Engineering; Statistical Methods; Optimization Methods

Papers and Posters (for the Dartmouth Biomedical Engineering Center): Lubrication in Prosthetic Joints, Tribology 2007; Comparison of Rotation in LCS and PFC-Sigma Knees, 2007; Pitting on the Articular Surface of the Tibial Component of Prosthetic Knees, Senior Honors Thesis 2006; Lessons from Retrievals: Oxidation and Porous Coating, 2006

#### RELEVANT WORK AND ENGINEERING EXPERIENCE

•	Investigated the causes for the differences in the torque required to generate rotation in LCS and PFC-sigma knees	2007
•	Determined the causes of pitting on the articular surface of prosthetic knees using rolling sliding machine and Instron	2006
•	Researched mechanical properties of UHMWPE (polyethylene) used in prosthetic knees with rolling-sliding machine	2005
•	Investigated surface profilometry of Low Contact Stress patellae	2004

## The National Gas Co. of Trinidad and Tobago, Trinidad: Engineering Intern and Commercial Analyst

•	Cross-referenced tax invoices and rectified discrepancies for pipeline usage on Atlantic LNG Train 4	Summer 2006
•	Tracked the spawning of cutting-edge projects in the Natural Gas Industry	Summer 2006
•	Designed a map of the US and Canada displaying current and future site of LNG terminals with information	
	about countries for supply and demand	Winter 2004
•	Researched turbine installation and calculated pipeline tariffs for Atlantic LNG trains 5 and 6	Winter 2004
•	Assisted in developing a proposal for the Vision 20/20 project for Energy Sustainability in Trinidad and Tobago	Summer 2003

## Dartmouth College, Hanover, NH: Engineering Design Projects

•	Designed and built an economically sustainable chair and desk for use in classrooms in Third-World Countries	2006-2007
•	CAD modeled and Rapid-prototyped/Injection Molded/Vacuum Cast a robot simulating bio-inspired motion	Spring 2007
•	Re-designed a remote-control car to enable retrieval and deposition of objects	Fall 2006
•	Designed and built a model bridge as part of a Solid Mechanics course	Summer 2004
•	Designed and built an ergonomically-enhanced walker for the elderly	Spring 2003

## ADDITIONAL WORK EXPERIENCE

## **Thayer School Machine Shop**

•	Shop assistant: Advised students with the use of various machines (band saws, drill presses, lathes); Designed	2004-2007
	and built a model of the Mars surface for testing Mars rovers	

## Volunteer at Outreach House, Hanover NH

•	Night-time caregiver for assisted living	2006-2007	

#### Graduate Advisor, Dartmouth College, NH

•	Career and academic counseling for ~600 undergraduates. W	Vorked alongside 20 other staff members	2007 - 2008

#### **SKILLS AND LANGUAGES**

Lean Six Sigma Green Belt certified #G0249, Programming in MATLAB, Maple, MathCAD, Software and Hardware knowledge includes MS Office Suite, Minitab, Pro-Mechanica, Pro-Engineer, Solid Works, FEMLAB, VeePro Data Acquisition, Profilometer and Pilotor, Waveform and Wavemaker Editor, FasTrack Console, INSTRON 8501, Final Cut Pro 5, Basic Proficiency in Spanish

ACTIVITIES & INTERESTS: Dartmouth Steel Band: President and Musical Director 2003-2006, Dartmouth College Cricket Club: Secretary 2004-2005, President 2006-2007, African-Caribbean Society, Dartmouth Film Society, Golf, Yoga, Swimming

## M. Wei Nice

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#### **EDUCATION**

#### 2005 - 2007

Thayer Schoool of Engineering, Dartmouth College

Hanover, NH

#### Master of Engineering Management, December 2007

- A collaborative program taught by faculty from the Thayer School of Engineering and the Tuck School of Business
- Appointed as Michel H. Zaleski Fellow (2006-2007)

#### Bachelor of Engineering, June 2007 (GPA: 3.53)

- Pursuing dual degree liberal arts and engineering program in collaboration with Bowdoin College
- Mechanical Engineering concentration with focus in structural mechanics
- Relevant Coursework: Solid Mechanics, Intermediate Solid Mechanics, Structural Dynamics, Systems, Thermodynamics, Engineering Statistics, Optimization Methods, Discrete and Probabilistic Systems, System Dynamics, Modern Information Technology

#### 2002 - 2005 Bo

Bowdoin College

Brunswick, ME

## Bachelor of Arts in Mathematics and Physics, December 2005 (GPA: 3.62)

- Member of College Social House System (Baxter House)
- Participated in the Baxter Buddy Tutoring Program, and intramural basketball and soccer
- · Received scholarship during senior year of high school to pursue college-level courses

#### PROJECT WORK

## Fall 2006

## **OPTIMIZING DESIGN FOR MANUFACTURE**

Hanover, NH

- Jetboil, Inc.
- Analyzed current assembly and flame-testing process with a thorough time study
- Proposed solutions for a more efficient method of assembly and flame-testing
- Optimized the structure and organization of the production floor

#### Fall 2005

#### STATIONARY FLOW OF AN INCOMPRESSIBLE FLUID

Brunswick, ME

## Bowdoin College

- Modeled the stationary flow of an incompressible, viscous fluid around an obstruction in a laminar flow with a set of coupled elliptic equations
- Developed code in C++ to solve the elliptic equations using the successive over-relaxation method

#### Fall 2004

## INTRODUCTION TO ENGINEERING

Hanover, NH

#### Thayer School of Engineering

- Led a five member team to optimize a motorboat protection device
- Designed, fabricated, and tested prototypes
- Researched the market potential, created a business model, and presented conclusions to a review board

## WORK EXPERIENCE

# 2001 - 2006

#### MAYFLOWER CHINESE RESTAURANT

South Paris, ME

## (Summers)

## Assistant Manager

- Supervised a six-person wait staff and planned their weekly schedules
- Other responsibilities included greeting customers, waiting tables, packaging orders, washing dishes, cooking part-time

#### 2002 - 2006

#### BOWDOIN COLLEGE - MATHEMATICS DEPARTMENT

Brunswick, ME

#### Teaching Assistant

- Graded weekly problem sets for Real Analysis and Multivariable Calculus
- Held weekly problem sessions in Differential, Integral and Multivariable Calculus

#### SKILLS AND INTERESTS

- Computer Skills: Microsoft Excel, PowerPoint, Word; Pro/ENGINEER; MATLAB; COMSOL
- Languages: Fluent in Cantonese, some written Chinese and Mandarin
- Enjoy traveling, skydiving, snowboarding
- Almost qualified for the 2006 World Series of Poker

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# Holly Hobbies

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#### **EDUCATION**

**Dartmouth College** Hanover, NH Doctor of Philosophy, Engineering Sci. September 2008 Dissertation: Dual-Frequency Ultrasound for Bubble Detection and Sizing

**Thayer School of Engineering** Hanover, NH Bachelor of Engineering (ABET accredited) June 2004 **Dartmouth College** Hanover, NH Bachelor of Arts, Engineering Sciences June 2004

Magna Cum Laude, Presidential Scholar, High honors in the major, GPA: 3.88, Major GPA: 3.88

#### RESEARCH AND WORK EXPERIENCE

Co-founder and Engineer

SustainX, Inc. West Lebanon, NH Fall 2007-present

· Developing new compressed-air energy storage technologies.

**Doctoral Dissertation** 2004-present

## **Dual-Frequency Ultrasound for Bubble Detection and Sizing**

Advisor: Dr. Julio Rogers

Committee: Dr. Brian Pogue, Dr. Marvin Doyley, Dr. Neal Pollock, Dr. Patrick Magari

Detection and sizing of microbubbles in blood and in tissue using dual-frequency ultrasound for the purpose of studying decompression sickness.

Undergraduate Honors Thesis

2003-2004

## Integration of a clinical ultrasound scanner with the Creare Dual Frequency Instrument

Advisor: Dr. Chungu Yu

Integration of the presentation capabilities of a clinical ultrasound machine with the bubble detection and sizing capabilities of a custom, dual-frequency ultrasound machine

Engineering Intern

Creare, Inc. Fall 2002, Summer 2003 Hanover, NH

Performed research and development activities on several projects:

- · Designed and executed experiments, analyzed the results
- · Wrote LabVIEW programs and set up the corresponding electronics to implement data acquisition systems
- · Characterized the properties of the sound field in the facility's sound room
- · Performed error analysis for calculated component efficiencies given error in potential sensors.

Presidential Scholars Research Assistant to Professor Ian Baker

## **Thayer School of Engineering**

Hanover, NH

Winter and Spring 2003

Explored the effect of annealing on percentages of certain crystal orientations in cold rolled nickel

Research Assistant

Summer 2000 **Kimball Physics** Wilton, NH

Assembled and tested production methods and equipment for a new type of electron gun. Built electronic timer circuitry, chemically etched cathode tips, setup vacuum chamber processing, wrote leak valve computer control program using LabVIEW.

## TEACHING EXPERIENCE

Volunteer After School Instructor for "Cool Science"

Samuel Morey Elementary School Whooe, VT

Fall 2007

Taught a weekly after school session on various science topics, including wetlands, electromagnets, lift and airplanes, light and color, pressure and submarines.

2 weeks of lectures in Engg 210: Spectral Analysis, Prof. Eric Hansen

**Thayer School of Engineering** Hanover, NH

Spring 2006

As part of the course, I prepared and taught two weeks of lectures, under the guidance of the professor.

Teaching Assistant for Engs 110: Signal Processing, Prof. Eric Hansen

**Thayer School of Engineering** Hanover, NH

Graded papers, led problem and review sessions for students.

Spring 2006

Section Leader for Engs 20: Introduction to Computer Science, Prof. Linda Wilson

#### **Thayer School of Engineering**

Hanover, NH

Spring 2002

Taught weekly 10-student recitation session, expanding on subjects covered in class, answering questions, and presenting new material. Supervised the computer lab, performed troubleshooting, helped students solve problems and answered questions. Corrected and graded assignments and exams

Tutor for Math 8: Calculus of Functions of One and Several Variables

**Dartmouth Math Department** 

Hanover, NH

Spring 2001

German Drill Instructor

#### **Dartmouth German Department**

Hanover, NH

Fall 2000-Winter 2002

Led daily sessions which provided an intensive language immersion environment in which basic vocabulary and grammatical skills were reinforced through active involvement and participation

#### **AWARDED GRANTS**

NSF grant number IIP-0000000 "SBIR Phase I: Pneumatic Energy Storage with Staged Hydraulic Conversion for Low Specific Cost Renewables Support"

#### PUBLICATIONS AND PRESENTATIONS

#### **Poster Presentations:**

- Holly Hobbies, S. D. Phillips, T. G. Donoghue, J. C. Wilbur, D. A. Knaus, P. J. Magari, J. C. Buckey. "Dual-frequency ultrasound detection and sizing of 20-200 micron bubbles for studying decompression sickness." Undersea & Hyperbaric Medicine Society Annual Scientific Meeting, June 2008
- Holly Hobbies, D. L. Alvarenga, D. A. Knaus, S. D. Phillips, P. J. Magari, J. C. Buckey. "Detection of Stationary Microbubbles in Tissue Using Dual-Frequency Ultrasound." Undersea & Hyperbaric Medicine Society Annual Scientific Meeting, June 2007
- Holly Hobbies, D. A. Knaus, S. D. Phillips, P. J. Magari, J. C. Buckey. "Detection of stationary microbubbles in tissue using dual-frequency ultrasound." Aerospace Medical Association 78th Annual Scientific Meeting, May 2007
- Holly Hobbies, J. C. Buckey, D. L. Alvarenga, D. A. Knaus, M. A. Kenton, and P. J. Magari. "Improved Bubble Detection for EVA." NASA Human Research Program Investigators' Workshop, January 2005

#### **Oral Presentations:**

- Holly Hobbies, S. D. Phillips, T. G. Donoghue, J. C. Wilbur, D. A. Knaus, P. J. Magari, J. C. Buckey. "Dual-frequency ultrasound detection and sizing of 20-200 micron bubbles for studying decompression sickness." Aerospace Medical Association 79th Annual Scientific Meeting, May 2008
- Holly Hobbies, D. L. Alvarenga, D. A. Knaus, S. D. Phillips, P. J. Magari, J. C. Buckey. "Detection of Stationary Microbubbles in Tissue Using Dual-Frequency Ultrasound." Undersea & Hyperbaric Medicine Society Annual Scientific Meeting, June 2007

#### **Publications:**

- Holly Hobbies, D. L. Alvarenga, D. A. Knaus, S. D. Phillips, P. J. Magari, J. C. Buckey. "Dual-Frequency Ultrasound Detection of Stationary Microbubbles in Tissue for Studying Decompression Sickness." Submitted, 2008.
- Holly Hobbies, D.A. Knaus, S. D. Phillips, J.C. Wilbur, T.G. Donoghue, P. J. Magari, J. C. Buckey. "Sizing of 20-200 micron Bubbles for Studying Decompression Sickness." In Preparation, 2008.

## RELATED LEADERSHIP / REPRESENTATIVE EXPERIENCE

M.S./Ph.D. Committee, Thayer School of Engineering: Ph.D. student representative to the committee.	
<b>Thayer Council:</b> Student Representative to faculty meetings.	2005-2007
Dartmouth Habitat for Humanity: Chair.	
Upper Valley Habitat for Humanity: Dartmouth Representative.	2002-2003

#### **LANGUAGES**

Native English Speaker Fluent in German Proficient in French

Proficient in Matlab, LabVIEW

Familiar with BASIC, Fortran, C, C++, Java, VHDL, and ProEngineer design and analysis software

#### PROFESSIONAL ORGANIZATIONS/ CERTIFICATIONS

Acoustical Society of America, Student Member	2004-present
American Institute of Aeronautics and Astronautics, Student Member	2004-present
Undersea and Hyperbaric Medical Society, Student Member	
American Society of Mechanical Engineers, Student Member	2006-present
Institute of Electrical and Electronics Engineers, Student Member	2006-present

**Fundamentals of Engineering (EIT) exam**, NH Joint Board of Licensure and Certification **Six Sigma Green Belt Certification**, Dartmouth Six Sigma

June 2004 January 2006

#### AWARDS/HONORS

Best Poster Presentation, Undersea & Hyperbaric Medicine Society Annual Scientific Meeting	June 2007	
The Dartmouth Society of Engineers Annual Prize in recognition of outstanding performance in the Bachelor of		
Engineering project at Thayer School of Engineering, Dartmouth College	June 2004	
Tau Beta Pi Engineering Honor Society		
Golden Key International Honor Society	August 2002	
Philip R. Jackson Award for best project in ENGS 21: Introduction to Engineering	June 2002	
National Society of Collegiate Scholars	May 2001	

## **REFERENCES**

**Rad Hoppery, M.D.** Professor of Medicine, Dartmouth Medical School, One Medical Center Dr., Lebanon NH 03756. Ph: 603-000-0000, rad.hoppery@dartmouth.edu

**Milan Booboos, Ph.D.** Associate Professor of Engineering, Thayer School of Engineering, Dartmouth College. 8000 Cummings Hall, Hanover, NH 03755. Ph: 603-000-0000, Milan.booboos@dartmouth.edu

**Handy Kate, Ph.D.** Associate Professor of Engineering, Thayer School of Engineering, Dartmouth College. 8000 Cummings Hall, Hanover, NH 03755. Ph: 603-000-0000, handy.kate@dartmouth.edu

**Chang Pitter** Assistant Dean, Thayer School of Engineering, Dartmouth College. 8000 Cummings Hall, Hanover, NH 03755. Ph: 603-000-0000, chang.pitter@dartmouth.edu