

Me Too

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| EDUCATION | Ph.D., Mechanical Engineering Expected Aug 2010 Specialization: Haptic Feedback for Prosthetics Advisor: Dr. xxx | Johns Hopkins University |
| | M.S., Mechanical Engineering 2004 - 2006 Specialization: Robotics Advisor: Dr. xxx | Johns Hopkins University |
| | B.S., Mechanical Engineering, <i>Cum Laude Society</i> 2000 - 2004 Thesis: Determination of Human Dynamics in a Pivot Turn | University of Pennsylvania |
| AWARDS/ ACHIEVEMENTS | NSF Graduate Research Fellowship Dean's Fellowship, JHU Whiting School of Engineering Jacob M. Abel Undergraduate Summer Research Internship, UPenn John & Lillian Neff Scholarship, UPenn | Sep 2006 - 2008, Sep 2009 - 2010 Sep 2004 - Sep 2009 Jun 2003 - Aug 2003 Sep 2000 - May 2004 |
| RESEARCH EXPERIENCE | Proprioceptive Feedback for Prosthetics May 2006 - Present <i>Haptics Laboratory</i> Created a robotic system and conducted human subjects studies to investigate the importance of proprioception during motion control and stiffness discrimination tasks. Results showed proprioception improves success rate during a targeting task. | Johns Hopkins University |
| | Vibratory Feedback to the Foot for Prosthetics May 2006 - Jun 2009 <i>Haptics Laboratory</i> Currently designing an experimental setup and will run a human subjects study to investigate the possibility of providing upper-limb prosthesis users tactile feedback, by giving vibrations to the foot. | Johns Hopkins University |
| | Human Performance in a Knob-Turning Task Sep 2004 - Mar 2007 <i>Haptics Laboratory</i> Created a robotic system and designed a human subject study to investigate turning strategies in a knob-turning task. Principal results from this study indicate that humans change their turning strategy depending on the knob-turning difficulty and apply forces and torques in directions that are not conducive to the task. | Johns Hopkins University |
| | Analysis of Human Movement Jan 2003 - May 2004 <i>Vestibular Ocular Motor Research Laboratory</i> Revised a human turning model to be more mathematically and anatomically accurate, did biomechanical testing, and created a simulation that supported my hypothesized turning model. | University of Pennsylvania |
| | Determination of Flow Patterns in Uterine Model May - Aug 2002 <i>Biofluids Lab</i> Performed biofluid study to analyze flow patterns in a uterine model upon injection of a dye. | Tel Aviv University |

TEACHING
EXPERIENCE

Teaching Assistant Johns Hopkins University
Jan - May 2008
Course: Electronics & Instrumentation
Level of Course: Sophomore Undergraduate
Primary Instructor: Dr. xxx
Instructing weekly lab sessions, grading lab reports, holding office hours, and lecturing three classes.

Teaching Assistant Johns Hopkins University
Jan - May 2006
Course: Design and Analysis of Dynamic Systems
Level of Course: Junior Undergraduate
Primary Instructor: Dr. xxx
Student Evaluations:
Effectiveness in helping students learn course material: 4.2/5
Genuine interest in students' progress in the course: 4.25/5
Provided thorough answers to student questions: 4.5/5
Held office hours, conducted problem solving sessions, graded homework, wrote up homework solutions, and lectured one class.

Academic Tutor University of Pennsylvania
Sep 2002 - May 2003
Topics: Calculus I, II, and Hebrew

MENTORING
EXPERIENCE

Undergraduate Student Mentor Johns Hopkins University
Aug 2008 - Present
Topic: Haptic Feedback through Toe Stimulation
Mentoring undergraduate student, xxx, in completing the design of an experimental set up, running a human subject study, analyzing the results, and publishing the findings.

Undergraduate Student Mentor Johns Hopkins University
Jun 2008 - Feb 2009
Topic: Vibratory Feedback to the Foot for Prosthetics
Mentoring undergraduate student, xxx, in completing the design of an experimental set up, running a human subject study, analyzing the results, and publishing the findings.

Undergraduate Student Mentor Johns Hopkins University
Oct - Dec 2007, Oct - Nov 2008
Topic: Vibratory Feedback to the Foot for Prosthetics
Mentoring undergraduate student, xxx, in the design of an experimental set up and human subject study for a foot haptics experiment.

Undergraduate Student Mentor Johns Hopkins University
Jan - May 2007
Topic: Skin Stretch Device for Prosthetics
Mentored undergraduate student, xxx, in the design of a skin stretch proprioceptive feedback device for prosthetics.

High School Students Mentor Johns Hopkins University
Jan - May 2006 & Jun - Aug 2006
Topic: Haptic Museum Display
Mentored two high school students consecutively in designing and building an educational haptic device to be displayed in a museum.

REFERENCED
CONFERENCE
PUBLICATIONS

N. Gurari, K. Smith, M. Madhav, and A. M. Okamura, *Environment Discrimination with Vibration Feedback to the Foot, Arm, and Fingertip*. Proceedings of the 11th International Conference on Rehabilitation Robotics (ICORR), pp. 343-348, 2009.

N. Gurari, K. J. Kuchenbecker, and A. M. Okamura, *Stiffness Discrimination with Visual and Proprioceptive Cues*. Proceedings of the Third Joint Eurohaptics Conference and Symposium on Haptic Interfaces for Virtual Environment and Teleoperator Systems (World Haptics), pp. 121-126, 2009.

J. Tapsan, N. Gurari, J. Diaz, E. Chicca, D. Sander, P. Pouliquen, and R. Etienne-Cummings, *The Feeling of Color: A Haptic Feedback Device for the Visually Disabled*. Proceedings of the Biomedical Circuits and Systems Conference (BiOCAS), pp. 381-384, 2008.

K. J. Kuchenbecker, N. Gurari, and A. M. Okamura, *Effects of Visual and Proprioceptive Motion Feedback on Human Control of Targeted Motion*. Proceedings of the 10th International Conference on Rehabilitation Robotics (ICORR), pp. 513-524, 2007.

N. Gurari and A. M. Okamura, *Human Performance in a Knob-Turning Task*. Proceedings of the Second Joint Eurohaptics Conference and Symposium on Haptic Interfaces for Virtual Environment and Teleoperator Systems (World Haptics), pp. 96-101, 2007.

K. J. Kuchenbecker, N. Gurari, and A. M. Okamura, *Quantifying the Value of Visual and Haptic Position Feedback During Force-Based Motion Control*. Proceedings of the Second Joint Eurohaptics Conference and Symposium on Haptic Interfaces for Virtual Environment and Teleoperator Systems (World Haptics), 2007.

PROFESSIONAL
ACTIVITIES

Leadership Activities

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| LCSR Graduate Student Committee, JHU, <i>Haptics Lab Representative</i> | Apr 2007 - Present |
| Women of Whiting, JHU, <i>Panel Chair</i> | Jan 2007 - Aug 2009 |
| Women of Whiting, JHU, <i>Peer Advisor</i> | Sep 2006 - Aug 2009 |
| Women of Whiting, JHU, <i>Social Chair</i> | Sep 2006 - Dec 2006 |
| Haptics Laboratory, JHU, <i>Manager of Human Subjects Protocols</i> | Sep 2006 - Dec 2009 |
| Haptics Laboratory, JHU, <i>Demo Coordinator</i> | Sep 2005 - May 2006 |
| Haptics Laboratory, JHU, <i>Web Master</i> | Sep 2004 - May 2005 |
| Society of Bioengineering, UPenn, <i>Sophomore Class Representative</i> | Sep 2001 - May 2002 |

Outreach Events

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| Engineering Without Borders, <i>Member</i> | Sep 2009 - Present |
| 2008 JHU Teaching Assistant Orientation, <i>'Leading Labs: Engineering' Speaker, Teaching Assistant Panel Member</i> | Sep 2008 |
| Women of Whiting, <i>WISE Panel Speaker</i> | Oct 2006 |
| Ready, Set, Design!, <i>Volunteer</i> | Feb 2006 |
| Computer Mania Day, <i>Break Out Session Leader</i> | Apr 2005 |
| Surgical Lego Competition, <i>Volunteer</i> | Feb 2005 |
| New Bike's Works, <i>Volunteer</i> | Sep 2001 - May 2002 |

Workshops Attended

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| Telluride Neuromorphic Cognition Engineering Workshop | Jul 2008 |
| JHU Teaching Assistant Training Workshops | Feb 2006 - May 2006 |

Technical Reviews

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| Haptics Symposium | 2010 |
| World Haptics (w/ Peer) | 2009 |
| IEEE International Conference on Robotics & Automation (w/ Advisor) | 2009 |
| IEEE Transactions on Systems, Man, & Cybernetics (w/ Advisor) | 2008 |
| IEEE International Conference on Robotics & Automation (w/ Advisor) | 2007 |
| Eurohaptics (w/ Advisor) | 2006 |

Professional Memberships

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| Engineers Without Borders – USA | Oct 2009 - Present |
| Society for Neuroscience | Jan 2008 - Present |
| Institute of Electrical and Electronics Engineers | Jan 2006 - Present |
| Women of Whiting, JHU, <i>Engineering School Women's Support Group</i> | Sep 2005 - Sep 2009 |
| CISSRS Student Computer Integrated Surgery Society, JHU | Sep 2004 - May 2005 |
| Pi Tau Sigma, Mechanical Engineering Honor Society | April 2004 - Present |
| Society of Bioengineering (BE), UPenn, <i>Undergraduate BE Society</i> | Sep 2001 - May 2002 |

EXTRACURRICULAR ACTIVITIES

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| Couchsurfer | Nov 2008 - Present |
| Outdoorsy Activities Enthusiast | May 2008 - Present |
| Salsa Dancing | May 2007 - Present |
| Cuban Salsa, <i>Assistant Instructor</i> | Jan 2009 |
| Women's Self Defense, <i>Assistant Instructor</i> | Jan 2009 |
| JHU Capoeira, <i>Instructor, Website Coordinator, and Leader</i> | Sep 2004 - May 2008 |
| ASCAB Penn Capoeira, <i>President</i> | Dec 2002 - May 2004 |
| Marathon Training | Aug 2002 - Oct 2002 |
| Club Swim Team | Jan 2002 - May 2002 |
| PADI Scuba Diving Certification | Sep 2001 - Dec 2001 |
| Varsity Track Team | Mar - May 2001 |
| Varsity Gymnastics Team | Sep 2000 - Mar 2001 |
| 9th Pan American Maccabi Games, <i>Gymnastics Team Member</i> | Jul 1999 |

PERSONAL

Date of Birth: xxx
Place of Birth: xxx
Citizenships: xxx
Languages:
- English Fluency
- Hebrew Fluency
- Russian Proficiency
- Spanish Proficiency
- Working Knowledge of Portuguese
- Working Knowledge of Polish

CONTACT
INFORMATION

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