

Alexandra Duritza

2409 Riverside Terrace Manasquan, NJ 08736
alexduritza@gmail.com
(732) 618-0094

OBJECTIVE

To exceed expectation as a manufacturing specialist within the Pharmaceutical field.

EDUCATION

Boston University College of Engineering, Boston, MA
Bachelor of Science in Biomedical Engineering May 2006

Related Course Work:

Systems Physiology and Quality	Signals and Systems in BME	Stats
Intro to Medical Imaging Economy	Solid Biomechanics	Engineering
Natural Computation & Biological Systems	Control System in BME	
Entrepreneurship-BME		

Senior Research Thesis

“Development of Vibrating Sandals to Enhance Sensorimotor Function”

- Designed and developed vibrating sandals to improve gait variability.
- Determined if through the addition of noise stride-to-stride variability could be reduced.
- Applied a mechanical vibration (a white noise signal, produced by linear actuators) to plantar surface of the foot by using the phenomenon known as Stochastic Resonance.
- Acquired pressure readings using Force sensing resistors (FSRs), accompanied with a Data Acquisition Board (DAQ), LabView and circuitry during the gait cycle.
- Analyzed gait cycle data points including mean stride time, standard deviation and coefficient of variation using MatLab.
- Senior Project included formal proposal, final report, oral presentations, and experience in FDA regulatory and intellectual property issues of products.

SUMMARY OF EXPERIENCE

Center for BioDynamics, Boston University

Research Intern; May 2005-May 2006

- Worked closely in association with the Afferent Corporation® to conduct research, collect and analyze data designed to improve balance control.

Auditory Neurophysiology Laboratory, Boston University

Research Intern (SURF Program), September-December 2003

- Trained gerbils for auditory advancements. (Animal Certified)
- Conducted experimental studies of the neuronal circuitry in the cochlear nucleus.
- Analyzed and recorded techniques used to study responses of neurons to acoustic stimulation.

Division of Traffic Safety and Engineering, Freehold, NJ June-August 2003

- Performed general drafting duties and comparison analysis of traffic

signal devices.

- Assisted in field duties such as taking field measurements, inspecting contractors' work and layout of proposed traffic engineering improvements.

COMPUTER PROFICIENCY

MicrosoftOffice, C++, MatLab, MathCad, LabView, Psplice, Cadence, Dreamweaver

PROFESSIONAL AFFILIATIONS

Boston University Society of Women Engineers, Boston University Biomedical Engineering Society

REFERENCES WILL BE FURNISHED UPON REQUEST