RESEARCH SCIENTIST

Professional Overview

Recent graduate with excellent research, time management and problem solving skills seeking a challenging position in a dynamic environment with opportunity for growth and advancement. Innovative Biomedical Engineer who improves development plan execution by consistently creating new formulations and new measurement techniques. Thorough, detail- and process-oriented, strong follow-through skills. Known for analyzing a situation and quickly implementing innovative resolutions.

Core Qualifications

PowerPoint , Multisim, X86 Assembly, C, AutoCAD, LabView, MATLAB	Lab maintenance, Excellent research skills,Â Detail oriented, Microsoft Word, Excel, Technical writingÂ

Education

Master of Science : Biomedical Engineering , January 2015 New Jersey Institute of Technology Coursework in Biomedical Signals and Data Acquisition, Virtual Medical Instrumentation, BioMEMs Design&Application, Cell and Molecular Tissue Engineering, Advanced Characterization of Biomaterials

Master of Science : Nuclear Physics Istanbul Technical University Coursework in Nondestructive Activation Analyses, Environmental Radioactivity and Measurement Techniques, Industrial Application of Nuclear Techniques

Bachelor of Science : Physics Anatolian University Coursework in Semiconductors, Solid State Physics, Quantum Physics, Nuclear Physics, Instrumental Analyses

Thesis/Dissertation

Masters Dissertation: " Determination of Gross Alpha and Gross Beta Radioactivity Level of Different Kinds of Marbles " examines the different approaches to capable of eliminating the background radiation and detecting the alpha and beta radiations from marble samples collected from different regions in the country, using Geiger counters and special software. In the time that was spent in a laboratory setting, I was able to develop important experimental skills and laboratory techniques, which include labeling, utilizing different kinds of tools and instruments, and drafting sketches of step by step experimental procedures.

B.S Thesis Project : " Theory of Chaos " examines the different approaches to how a small change in initial conditions can drastically alter the long-term behavior of physical systems. For example, the electrochemical signals in the heart indicating unpredictability, or chaos can trigger a heart attack and also, a reduced standard deviation of heartbeat intervals can lead to increased mortality.

Experience

Research Scientist

September 2013 to January 2015 Abbott Laboratories

- â€‹Project: "Medical Applications of Collagen Based Biomaterials in Tissue Engineering " Analyzed distribution and function of various collagen types in different tissues to understand collagen related diseases.
- Focused on collagen features as low immunogenicity, biodegradability, and large scale isolation.
- Performed engineering calculations, advanced data analysis, signal processing and statistics techniques (Matlab,R,SPSS) Analyzed and interpreted experimental data and made recommendations such as approval or rejection of collagen biomaterials based on results.
- Grant writing protocols in neuroscience/engineering fields (Federal, state,private).

Research Assistant

September 2012 to June 2014 Loma Linda University Medical Center

- Developed a transcutaneous optoeletronic system to evaluate the transmission and spatial spread of NIR light through various tissue samples.
- Designed and developed an experimental setup that consisted of electronic circuits, optical components and micromanipulators.
- Worked in a team on surgical device sterilization (EtO,autoclave), surgery room preparation and anesthesia systems for in vivo experiments Provided technical understanding to undergraduate students for their projects and leaded them throughout their thesis.

Teaching Assistant

September 2012 to March 2014 Kansas State University Foundation

- Initiated engineering notion and wonder in students' mind by motivating and lecturing them.
- Supervised student to design and implement electronic circuits using electrical circuit development tools.
- Performed embedded microcontroller system design and programming in C in laboratory.
- Performed troubleshooting on issues with circuits, isolated the issues in hardware or software, and found solutions.

Memberships/Scholarly Societies

Society of Women Engineer

Motivate women to achieve full potential in careers as engineers and leaders

Skills

Embedded micro-controller programing in C, Testing & solid troubleshooting skills in hardware and software components, Electrical schematic design and PCB layout, Hands on experience with laboratory instruments and tools , Strong organizational, problem solving & analytical skills , Data Acquisition, Data analysis, Experiments, Grant writing, LabView, Lecturing, Neuroscience, Physics, Protocols, Statistics, System design, Troubleshooting