Tweet (function() { var s = document.createElement('SCRIPT'), s1 = document.getElementsByTagName('SCRIPT')[0]; s.type = 'text/javascript'; s.async = true; s.src = 'http://widgets.digg.com/buttons.js'; s1.parentNode.insertBefore(s, s1); })();

OBJECTIVE

I am seeking a long term career in Biomedical research to utilize my knowledgeand expertise in Bio Instrumentation, Medical Imaging, Signal Processing and Physiology, to contribute towards growth of my career and organization.

RELEVANT SKILLS AND QUALIFICATION>

- Expertise in areas of Bioinstrumentation, Medical Imaging and Biosignal Processing.
- 2 year experience as research assistant in Bioinstrumentation and Signal Processing Lab.
- 1 year experience as software engineer in IT industry.
- Proficiency in C, C++, MATLAB, Object Oriented Programming, SAS, LabVIEW, MS Office.
- Experience in database SQL and hardware-software interface device control modules.
- Expertise in imaging modalities such as CT, PET, MRI, Ultrasound, X-ray and Optical Imaging systems.
- Successfully analyzed medical images using image registration, image segmentation, image filtering, feature extraction and reconstruction techniques. Also experience in extraction of features from video (ultrasound video by dividing the video into frames using MATLAB) and pattern recognition technique.
- Thorough knowledge and hands on experience in device testing, automation, calibration, validation.
- Experience in quality management standards such as ISO, FDA and GMP and familiar with writing regulatory reports.
- Excellent in writing scientific papers and scientific presentations
- Excellent analytical, communication, scientific presentation and management skills.

EDUCATION

Master of Science in Biomedical Engineering
Bachelor of Technology in Biomedical Engineering

WORK EXPERIENCE

Graduate Research Assistant, Confidential, UTA 08/2008-08/2010
Software Engineer, Confidential, India 06/2007-06/2008

RESEARCH PROJECTS UNDERTAKEN

Investigation of End-Tidal Carbon Dioxide (ETCO2) and Heart Rate Variations during Sleep Apnea

- Hands on experience with respiratory and cardiac devices such as CO2 monitor, pulse oximeter and ECG monitors
- Successfully extracted features from CO2 and ECG waveform to quantify the metabolic variations during apnea **.**
- Explored the relationship between cerebral blood flow and heart rate with respect to CO2 accumulation in body during apnea
- Designed and developed hardware and software required for data acquisitions from different monitors simultaneously for sleep study and had experience at monitoring patient data in clinical settings.
- Performed clinical trials on human subjects in sleep laboratory.
- Prepared consent forms for the subjects participating in the study and have designed experimental protocol for conducting the study.
- Project Management, experimental design, implementation, data analysis and interpretation, scientific presentations.

Data Acquisition using LABVIEW software

- Gained thorough knowledge on LabVIEW, testing and automation explorer for data collection.
- Designed LabVIEW program for data acquisition and synchronization of different systems using DAQ 6024E and CB-68LP.

Image Reconstruction Techniques

- Performed reconstruction of CT images using MATLAB.
- Successfully compared different reconstruction methods:Direct Fourier Reconstruction, Fourier Filtered Back Projection, Filtered Back Projection.

Analysis of Brain Activity using AFNI and Homer Software

- Performed brain activation studies in human subjects using motor and sensory stimulation tasks with the aid of optical near infrared imaging techniques.
- Using AFNI and Homer software, regions of neuronal activity and functional connectivity in human brain is found out.

Extra Vascular Ultrasound Segmentation Using MATLAB

- Divided the Ultrasound video of the blood vessel into many frames and further processed to find vascular related problems.

ACADEMIC COURSES

Digital Signal Processing, Functional Magnetic Resonance Imaging, Medical Imaging, Fluorescence Microscopy, Bio Instrumentation, Bio Statistics, Electronics Devices and Circuits, Robotics and Automation, Bio Transducers and Applications, Ergonomics, Computer Networking, Pulse and Digital Circuits.

ACCOMPLISHMENTS

- Presented poster on “Investigation of ETCO2 and heart rate variations during sleep apnea”, BMESS Conference, Austin, October, 2010.
- Poster Presentation at ACES technical symposium, 2010.
- Received Robert and Carol Eberhart Scholarship for outstanding student at University of Texas, Arlington.

- Invitee to Golden KeyInternational Honor Society.
- Outstanding student award for consecutive 4 years during Bachelors degree at GRIET, INDIA.
- Award at PRAGNYA (technical symposium) in JNTU, INDIA.