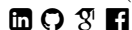


# VENKAIAH CHOWDARY KAVURI

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September 16, 2015

Dear Hiring Manager,

I am Venkaiah Kavuri, postdoctoral researcher from Dr. Arjun Yodh's lab in Department of Physics at University of Pennsylvania. I am writing in to express my interest **Research Scientist** position at your company. As a forward thinking postdoc, I am motivated to be part of several projects simultaneously by involving in different roles such as development, data processing/programing and testing. Areas of strength that will guide me in delivering successes towards meeting your organization's goals include **Instrument Development, Scientific Programing, Signal Processing, Algorithm Development, Data mining, and Statistical Analysis.**

Some of my technical proficiencies include:

- In-depth understanding of global and local optimization and a working knowledge of advanced signal processing techniques (such as, Kalman filtering and time-varying frequency analysis).
- Demonstrated record in biooptical modeling using problem-solving techniques such as numerical modeling, inverse problems, optimization and data mining.
- Skilled at designing, conducting and testing in vitro/in vivo experiments to thoroughly analyze device prototypes and develop commercially-viable product enhancements.
- Knowledgeable about Ultrasound physics and Photoacoustics.

While working as a Postdoc at University of Pennsylvania; I originated, designed and built a optical flow measurement device to be used in Neural ICU for predicting recurrent stroke. I am also working on wearable blood flow measurement device(using Intel Edison) to be used for measuring blood flow in muscle. During my Phd at University of Texas Arlington, I applied statistical methods to develop a new technique for detecting and imaging early stages of aggressive prostate cancer by creating, engineering and building a TRUS-compatible DOT Probe. I also originated, designed and built multi-spectral, low-cost and portable DOT instrumentation then improved existing reconstruction methods by combining depth compensation algorithm and L1-regularized least squares method.

I welcome the opportunity to participate in a personal interview to answer your questions and better present my qualifications. I look forward to speaking with you soon.

Thank you for your time and consideration.

Sincerely,

Venkaiah Kavuri