**ORNL Publications**

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**Job Posting Title**
Postdoctoral Research Associate - Computer Vision and Machine Learning / NB50486733

**Posted Date**
08/04/2015

**End Posting Date**
10/01/2015

**Purpose**
The Imaging, Signals, and Machine Learning (ISML) group at the Oak Ridge National Laboratory (ORNL) is seeking a Postdoctoral Research Associate with expertise in computer vision/image processing and data analytics. The ISML group conducts applied computer vision research and development addressing important issues of industrial and economic competitiveness, biomedical measurement science, and national security. The group consists of staff members with backgrounds in electrical engineering, computer science, and optical engineering, and frequently collaborates with partners in industry, academia, and other government organizations.

**Major Duties/Responsibilities**
This position will be responsible to pursue research and development of computer vision techniques coupled with machine learning/data analytics approaches for the quality control of additive manufacturing processes. Joining a research team consisting of material scientists, electrical engineers and computer scientists, the successful candidate shall demonstrate a well-rounded ability to perform technically in at least one of the following areas:
- Computer vision and machine learning
- Multi-dimensional and multi-modal signal processing
- Spatiotemporal data mining
- Multidimensional data visualization and data understanding

The candidate is expected to publish work in professional journals and to present results to the scientific community.

**Qualifications Required**
- The position requires a Ph.D. in electrical engineering, computer engineering, computer science or closely related field
- Experience in designing and building algorithms for 2D and 3D image understanding
- Demonstrated experience conceiving and executing research and development projects
- Substantial programming skills using tools such as C/C++ / Python / Matlab
- Significant experience with the following libraries is mandatory: OpenCV, CUDA, Qt

**Qualifications Preferred:**
- Experience with thermal imaging

Applicants cannot have received the most recent degree more than five years prior to the date of application and must complete all degree requirements before starting their appointment.
This position will remain open for a minimum of 5 days after which it will close when a qualified candidate is identified and/or hired.

We accept Word(.doc, .docx), Excel(.xls, .xlsx), PowerPoint(.ppt, .pptx), Adobe(.pdf), Rich Text Format(.rtf), HTML(.htm, .html) and text files(.txt) up to 2MB in size. Resumes from third party vendors will not be accepted; these resumes will be deleted and the candidates submitted will not be considered for employment.

If you have trouble applying for a position, please email ORNLRecruiting@ornl.gov.

Notice: If the position requires a Security Clearance, reviews and tests for the absence of any illegal drug as defined in 10 CFR 707.4 will be conducted by the employer and a background investigation by the Federal government may be required to obtain an access authorization prior to employment and subsequent reinvestigations may be required.

If the position is covered by the Counterintelligence Evaluation Program regulations at 10 CFR 709, a counterintelligence evaluation may include a counterintelligence-scope polygraph examination.

ORNL is an equal opportunity employer. All qualified applicants, including individuals with disabilities and protected veterans, are encouraged to apply. UT-Battelle is an E-Verify Employer.