MASTER/POSTMASTER POSITION

Purpose
The Imaging, Signals, and Machine Learning (ISML) group is seeking qualified candidates 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 implement computer vision algorithms, to develop graphical user interfaces, and to process large datasets for the purpose of understanding additive manufacturing processes. Additional information on our research activities can be found at this address: http://web.ornl.gov/sci/manufacturing/df/. Joining a research team of material scientists, electrical engineers and computer scientists, the successful candidate shall demonstrate a well-rounded ability to develop high quality and reliable programs in C++ or Python. To meet the requirements of the projects, notions and prior work in at least one of the following areas are desired:

- Computer vision and machine learning
- Multidimensional data visualization and data understanding
- High performance computing on GPU platform

Multiple openings are available.

Qualifications Required
- The position requires a degree in Computer Science, Computer Engineering, or Electrical Engineering, up to a Master's Degree.
- Experience in designing and building algorithms for 2D and 3D image understanding;
- Experience analysis data using machine learning algorithms;
- Demonstrated experience conceiving and executing software development projects;
- Substantial programming skills using tools such as C/C++, Python, and Matlab;
- Significant experience with the following libraries is desired: OpenCV, CUDA, and Qt.

Period of performance
This assignment is for a period of one year renewable based on availability of funding. The position is for 20 hours per week.

Contact information
Please direct your questions and/or send your resumes to Dr. Vincent Paquit (paquitvc@ornl.gov) at the Oak Ridge National Laboratory.