Sr. Research Engineer – Machine Learning/Image Processing

Description

Sony Corporation of America currently has an opening for a Sr. Research Engineer – Machine Learning/Image Processing in our U.S. Research Center located in San Jose, CA. This position is responsible for researching and developing image processing, machine learning, and computer vision algorithms for new Sony products.

Responsibilities will include investigating and utilizing complex engineering and mathematical principles to develop core technologies, compose algorithm structures and find solutions to problems. This will include assessment and improvement of algorithm performance on a variety of platforms. This position also requires the engineer to analyze and determine system standards and test procedures. As a Sr. Research Engineer – Machine Learning/Image Processing, this individual will be responsible for writing invention disclosures for developed algorithms and will work with patent attorneys to secure intellectual property. This individual will work on problems of diverse scope where analysis of data requires evaluation of identifiable factors and demonstrate good judgment in selecting methods and techniques for obtaining solutions.

Qualifications

- PhD degree (or MS degree with a minimum of 3 years of related experience) in Electrical Engineering, or Computer Engineering, or Computer Science, or Applied Mathematics or related field, is required.
- Knowledge and experience in deep learning and computer vision, are required
- Previous research work in related areas such as digital image processing (specifically in camera signal processing), content-based video/image analysis, image restoration, and knowledge of human visual system are highly preferred
- Excellent programming skills in C/C++, and Python are required
- Knowledge of machine learning libraries such as TensorFlow, PyTorch is essential
- Excellent communication and presentation skills are required
- Linux experience is a plus

Responsibilities

- Research and assess current technologies
- Perform feasibility studies to validate capability and functionality
- Create new concepts from initial design to market release
- Document all phases of research and development.
- Draft and submit intellectual property.
- Draft and submit professional articles for technical journals as required
- Offer advanced technical expertise to design and develop algorithms and software applications
- Create new technical and domain expertise and apply to products and problems
- Manage and maintain current algorithms and software applications
- Assess and improve or extend algorithms and software applications
- Determine and resolve complex application issues and bugs

Remote work can be considered after extensive period of on-site training and may require monthly business trips to the main office.
As part of our commitment to health and safety, this position requires that the job candidate be fully vaccinated against COVID-19. Please note that an applicant will be considered fully vaccinated two weeks after their second dose in a 2-dose vaccine series (Pfizer or Moderna), or two weeks after a single-dose vaccine (Johnson & Johnson's Janssen vaccine). The Company will consider requests for reasonable accommodations for documented medical reasons and for sincerely held religious beliefs in accordance with applicable law. Please do not include proof of vaccine status or any indication of a possible request for an accommodation when submitting your application materials. If applicable, the Company will follow up with you directly to request proof of vaccination and to discuss any potential accommodations.