

Intelligent Video Applications Researcher

The Xerox Research Center Webster is seeking researchers in the area of Intelligent Video Applications. For this position, we are interested in utilizing knowledge extracted from information in video format to provide new capabilities central to our future business strategy. One area of research focuses on how to develop and apply intelligent processing of video information to enhance effectiveness of the knowledge worker. In addition, with the acquisition of Affiliated Computer Services (ACS), Xerox has a significant business in transportation services. Research in this area will focus on developing an intelligent transportation system that incorporates state of the art technology to enable safety, security, manage traffic flow and resources in a large dynamic transportation system. Fundamental areas of research include identification and extraction of knowledge from real-time video streams that can direct or inform applications as part of an overall intelligent transportation network.

Applicants must have a solid mathematics background with a focus on image/video processing and analysis including compression and multi-spectral applications. Experience in research and development in advanced analysis, image/video processing, machine learning is required to identify and segment out useful content in multiple large video streams. A focus on developing algorithms that can be implemented with minimal/efficient computational resources is also desired. The candidate is required to be a visionary and highly creative, out of the box problem-solver, capable of proposing novel solutions to problems and working to refine those solutions in a real world context. The candidate will collaborate closely with other R&D scientists and engineers in developing and implementing solutions in a multi-disciplinary work environment.

The applicant should also have strong skills in software engineering with expertise in current programming and analysis languages to generate prototype demonstrations of the research work.

Role/Responsibilities:

Invent, design and prototype novel video analysis applications that intelligently extract relevant information from video data streams. Apply machine learning techniques and other novel approaches to utilize the information as part of knowledge work and intelligent transportation systems applications. Proactively identify new areas of research and develop value based proposals for investments in those areas. Work with existing "intrapreneurship" and business teams to develop and help commercialize highly user-centric, adaptive, and robust systems.

Requirements:

- A PhD or Post-Doc in mathematics/statistics, computer science, electrical engineering, or other related areas. A candidate with MS or BS degree with equivalent work experience may also apply. Industrial experience will be a definite plus.
- Research or entrepreneurial experience developing video/image analysis technology with a focus on information and content identification and extraction.
- Strong analytical, written, and verbal communication skills

Contact: Robert Loce, robert.loce@xerox.com