

Signal and Image Processing Engineer: Sr. Principal Signal and Image Processing Engineer

Researches, designs and develops signal and image collection, processing, and dissemination systems. Develops requirements analysis, system architecture, and integrates new signal and image processing technology systems. Designs, develops and analyzes systems for the extraction of information from signal and image sensors. Systems utilization include as detection and estimation theories, speech processing, and neural networks; electromagnetic and acoustic effects on signals; and implementation of signal processing with advanced computer architectures.

Discretion/Latitude

Works under consultative direction toward predetermined long-range goals and objectives. Assignments are often self-initiated. Determines and pursues courses of action necessary to obtain desired results. Work checked through consultation and agreement with others rather than by formal review of superior.

Knowledge, Skills and Abilities

Applies advanced technical principles, theories, and concepts. Contributes to the development of new principles and concepts. Widely recognized for achievements, technical expertise and meritorious standing within professional field. Identifies, analyzes and develops new business opportunities. Establishes customer contacts, conducts research and analysis into their future plans and needs, assists with the development of their specifications, develops proposals, and delivers marketing presentations.

Problem Solving

Works on unusually complex technical problems, and provides solutions that are highly innovative and ingenious.

Impact

Develops advanced technological ideas and guides their development into a final product. Erroneous decisions or recommendations would typically result in failure to achieve critical organizational objectives and affect the image of the organization's technological capability. Functions in a program leadership role. Plays a key role in implementing programs/projects and makes significant contributions to department goals and overall functional strategic planning efforts.

Liaison

Serves as organization spokesperson on advanced projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications. Often instrumental in attracting and obtaining major new company business.

Minimum Education and Experience

15+ years with BS in designated Engineering or related field.. Employees usually have advanced degree in field of specialization.