Senior Software Engineer

JOB SUMMARY:
Under direction of the Manager of Software Engineering, responsible for analyzing, designing, developing, troubleshooting and debugging of software programs. Architects software for real time hardware control, data acquisition, data analysis and human interfaces.Develops software specifications in accordance with PACE and ISO9000 standards. Works on problems of diverse scope where analysis of data requires identification of factors. Exercises judgment within broadly defined practices and policies in selecting methods, techniques and evaluation criteria for obtaining results.

ESSENTIAL RESPONSIBILITIES:

1. Handles requests for modifications to existing software from internal or external sources. Performs problem diagnosis, solution planning, implementation, troubleshooting and verification. Creates software modification design, logic changes and applicable coding. Conducts design reviews. Creates appropriate documentation. Performs input/output simulation as required. Releases revised software to System Test Engineering. Standardizes problem fixes into current software releases and revisions.

2. Handles requests for new features to existing software from internal or external sources. Performs needs analysis, solution planning, implementation and verification. Creates software modification design, logic changes and applicable coding. Conducts design reviews. Creates appropriate documentation. Performs input/output simulation as required. Releases revised software to System Test Engineering. Incorporates new features into current standard software products and applications as required. Consult with other engineering groups in the design/development of software interfaces for new equipment.

3. Aids departmental manager in setting development direction new software tools and methods from internal or external sources. Performs and documents needs analysis, market survey. Attends appropriate industry seminars or training sessions. Provides solution proposal and recommendation.

4. Acts as an internal resource by providing software language and application mentoring for more junior software engineering staff, application engineers, and manufacturing support personnel.

5. Manage and maintain the departmental software design and operations guidelines per PACE and ISO9000 standards.

REQUIREMENTS: A minimum of a BSc in Computer Science, or Mathematics (or relevant degree) together with 7 years experience in designing and implementing software utilizing High Level Languages. Proficient with object oriented or structured programming techniques and a working knowledge of software machine control preferably in the single wafer and batch equipment for silicon wafer surface preparation field. Must be able to function under a high level of stress. Must possess excellent problem solving, technical writing and verbal communication skills. Must be capable of high level business dialog to interact with all organizational levels and external customers. Must be able to handle and prioritize multiple projects. Must be proficient in standard MS Office software including Electronic Mail Systems and Internet. Must have extensive/applied knowledge in structured software design techniques or ISO9000 standards. Must have a mature skill set in high level languages such as C, C++, PASCAL or equivalent. Must be proficient in PLC programing.

About Akrion Systems
Akrion Systems provides advanced surface preparation process solutions and systems, including single-wafer and batch-immersion cleaning tools for the microelectronic, display and photovoltaic industries. Akrion Systems’ customers produce a diverse range of products, including solar cells, integrated circuits for DRAM, Flash, Logic and MEMS as well as new and reclaimed semiconductor wafers, flat panel displays, and photomasks. Company headquarters in Allentown, Pennsylvania includes a class-1 clean room for process development and an ISO 9001:2000 compliant production facility. For further information, please visit the Akrion Systems web site: http://www.akrionsystems.com.