

TOM RECKHOLDER

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PROJECT / PROGRAM MANAGEMENT PROFESSIONAL

Life Science Instruments ♦ Semiconductor Equipment ♦ Process Automation

QUALIFICATIONS SUMMARY

Detail oriented and technically strong **Project Leader** with 20-year career developing state of the art equipment for life science research and semiconductor fabrication. Extensive experience in the following areas:

- ❑ **Project & Program Management**—Formally trained project manager accountable for development projects up to \$3.5M budget and project staff up to 20 people. Skilled in authoring comprehensive project plans that include project scope and objectives, work breakdown structure (WBS), schedule, cost estimation, staffing requirements, cost-benefits analysis (NPV and IRR), risk analysis and mitigation.
 - ❑ **New Product Development**—Directed development of complex instruments and process equipment. Guided projects from initial concept through manufacturing utilizing a phase-based (stage-gate) product development process. Competent in leading cross-functional core teams with representatives from Marketing, Engineering, Manufacturing, and Field Service.
 - ❑ **Systems Engineering**—Served as systems engineer to define product requirements, develop operational concepts and system architecture, write integration and test plans, ensure regulatory compliance, meet ergonomic and human-machine interface requirements.
 - ❑ **Technical Competencies**—Gained hands-on experience through development and integration of precision positioning systems; pick and place robots; instrumentation electronics (transducers, signal conditioning, data acquisition); fluorescence and other photo-luminescent detection systems; nano-liter fluid dispensing systems; industrial controls; AC/DC power distribution systems, printed circuit board design.
 - ❑ **Engineering Management**—Supervised engineering departments, established department budgets, set performance goals, conducted employee appraisals, and recruited team members.
 - ❑ **Computer Skills**—Proficient in Windows, MS Project, MS Office (Word, Excel, PowerPoint), Visio, Outlook, Web Browsers
 - ❑ **Language Skills**—Fluent in English and German (speaking, reading, and writing).
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PROFESSIONAL EXPERIENCE

LATHROP ENGINEERING, San Jose, CA (2005 – 2006)

Design & Engineering Services

Program Manager: Hired to direct development programs and manage client relationships. Wrote client proposals to define project scope, schedule, budget, and staffing needs. Successfully met contract obligations by delivering projects on time and on budget.

- EDC Biosystems: Managed fast-track redesign of nano-liter fluidic transfer system to introduce new product at major trade show. Successfully met key design goals of reducing instrument cost by 50% and significantly reducing instrument size to fit on laboratory bench.
- Fluidigm Corp: Led development effort to take prototype of genetic analysis system to final product design. Met aggressive schedule objectives and engineering goals by presenting an eye-catching industrial design and optimized component packaging that reduced instrument size by 50%.

♦ continued ♦

CIPHERGEN BIOSYSTEMS, Fremont, CA (2002 – 2005)

ProteinChip® Arrays

Engineering / Project Manager: Recruited to define, develop, and launch an automated production system using high-throughput robotic process equipment. Achieved all project goals to increase manufacturing capacity by 300% to 2,500 ProteinChip arrays per day, reducing manufacturing cost by 50%, and increasing lot-to-lot manufacturing reproducibility. Delivered project on schedule and under budget.

- Analyzed manual production processes and identified process requirements for automated system. Developed system architecture and workflow model to assess throughput capability.
- Established schedule, budget, and resource needs. Performed financial analysis (NPV, IRR, cost of goods) to demonstrate project viability and obtained senior management approval for \$2.5M investment.
- Concurrently managed external engineering design firm, internal project team, and turnkey suppliers to develop custom and semi-custom process equipment. Provided facility requirements to general contractor to build a Class 100,000 cleanroom.

AMERSHAM BIOSCIENCES, Sunnyvale, CA (1997 – 2002)

DNA Microarrays

Sr. Project Manager: Hired to supervise engineering team and direct development of instruments for company's DNA Microarray business unit. Played active role in company's adaptation of new product development process.

- Led cross-functional core team to develop and launch commercial DNA Microarray printer ("spotter"). Drove instrument architecture by integrating proprietary, nano-liter dispensing technology with high-speed robotics that produced industry-leading performance to print 20,000 DNA samples on a microscope slide in <10 minutes.
- Directed engineering team to develop DNA Microarray reader ("scanner") based on fluorescence detection technology. Scanner featured a first-in-the-market automatic slide loading mechanism to process up to 12 DNA Microarray slides without user intervention.

KLA-TENCOR, Milpitas, CA (1992 – 1997)

Semiconductor Metrology Equipment

Project Manager (1995 – 1997): Promoted to project manager and engineering supervisor to lead development of new resistance-mapping instrument capable of processing 200mm and 300mm wafers.

Staff Electronics Engineer (1992 – 1995): Developed instrumentation electronics for wafer resistance-mapping instrument. Achieved industry-leading measurement performance (dynamic range, speed, precision, accuracy) that allowed company to maintain 90% market share. Carried design from breadboard to full turnkey manufacturing.

PRIOR EXPERIENCE

Ten years as senior electronics engineer designing printed circuit boards and electronic control systems for semiconductor lithography equipment. Prior career highlights:

- Conceptualized, designed, and implemented computer controlled UV exposure system, robotic wafer handling system, and 3kW AC/DC power distribution system.
- Designed, built prototypes, and released to production printed circuit boards and firmware for real-time signal processing system for reticle-to-wafer alignment, digital DC motor controller for wafer and reticle positioning systems, monochrome CRT display, and dot-matrix printer controller

EDUCATION, CERTIFICATIONS, TRAINING

Master of Science, Systems Management, Notre Dame De Namur University, Belmont, CA

Bachelor of Science, Electrical Engineering, Interstate University of Applied Sciences of Technology, Switzerland

Certificate in Project Management, University of California, Santa Cruz, CA

COMPANY SPONSORED TRAINING

Program Management ♦ Project Management ♦ Team Leadership ♦ Systems Engineering ♦ Product Development Process ♦ Finance & Marketing Skills ♦ Priority Management ♦ CE Compliance ♦ ISO-9000 ♦ cGMP