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## PROFESSIONAL EXPERIENCE

**KLA-Tencor Corporation**                      **Senior Director of Engineering**                      **2005-2007**

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E-Beam Review and Metrology Products

- Directed systems and algorithms teams developing multimillion dollar automated scanning electron systems for the semiconductor metrology and defect review markets.
- Responsible for establishing performance specifications and insuring compliance.
- Responsible for image and signal processing algorithm development and maintenance.
- Served as program chief engineer and personally developed several key algorithms and models.

**KLA-Tencor Corporation**                      **Principal Platform Architect**                      **2004-2005**

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E-Beam Next Generation Platform

- Systems analysis, modeling and architecture for a next-generation common hardware and software platform to serve multiple internal customers.
- Authored several sophisticated models and simulations to establish design requirements.
- Platform met all performance and cost targets and was delivered to schedule.

**KLA-Tencor Corporation**                      **Senior Director of Software Engineering**                      **1997-2004**

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E-Beam Metrology Products

- Development of multimillion line software application for automated scanning electron systems serving the semiconductor metrology market.
- Assembled a team from scratch, peaking at 35 managers, engineers and quality personnel.
- Served as software architect and authored significant portions of the code.

### Early Career

- Senior Marketing Manager, KLA Instruments (2 years).
- Technical Support Manager, KLA Instruments (2 years).
- Engineering Liaison Manager, KLA Instruments (3 years).
- Senior Technical Support Engineer, KLA Instruments (5 years).
- Senior Scientific Software Engineer, Lockheed Missiles and Space (2 years).

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## SKILL SUMMARY

### Leadership Skills

- Led several programs developing complex, multidiscipline systems from startup to obsolescence.
- Advocate of highly agile processes designed to quickly and incrementally evolve systems.
- Hands-on management style, believer in MBWA and the open-door policy.
- Quickly gain respect and trust of associates at all levels and disciplines – including smart engineers.
- International travel experience, remote team coordination, technical conference and trade shows.
- Institutionalized quality processes including CMM, ISO, defect and product life-cycle management.

### Technology Skills

- Expert at complex software and system architecture, design and implementation.
- Proficient in object oriented design, C/C++, Java, VB, PHP, Python, Eclipse and MATLAB.
- Strong understanding of digital, optical, robotic, mechanical, pneumatic and vacuum systems.
- Adept in statistics, simulation and modeling, signal and image processing, and noise reduction.
- Web 2.0 skills – HTML, XML, AS3, SVG, LAMP (Linux, Apache, MySQL, PHP), Drupal and JavaScript.

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## **PATENTS AND PUBLICATIONS**

Co-inventor of five patents – 7015468, 7041976, 7241991 and two pending.  
Author and presenter of conference papers at BACUS (1993) and Semicon West (1996).  
1988 Compute's PC Magazine, "Programmable Printer PopUp shareware package."

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## **EDUCATION**

BSCS, University of the Pacific, Summa Cum Laude, GPA 3.98.  
MSEM (partial), Santa Clara University, GPA 4.00.  
Roughly 20 management training courses taken over the span of my career.