

Ananda V. Mysore

1035 Aster Ave. #1178,
Sunnyvale, CA 94086
(408) 306-4537

mvananda@sbcglobal.net

Background Summary

Extensive experience in the concept design, system development & integration and testing of high precision inspection & measurement systems incorporating Machine Vision, Laser and other non-contact and contact measurement technologies. Related areas of expertise include:

- Cost effective sub-micron metrology system design, development & Mathematical modeling
- Software development using LabVIEW and IMAQ Vision
- DFSS & Statistical data analysis
- X-Y Stage error mapping and Motion System Analysis
- Laser Interferometer measurements of stage errors
- Recognized by the professional organizations in the dimensional metrology field

Experience

San Jose State University, San Jose, CA

[Part-time Faculty at the Department of MAE](#)

2008 - Present

- Taught ME120 "Experimental methods for Engineers" course and labs for undergraduate Mechanical And Aerospace students
- Advised Graduate Mechanical Engineering students on their Master's degree project work

Seagate Technology, Scotts Valley, CA

Senior Staff Development Engineer

2001-2009

- Responsibilities include design & development of Advanced Metrology solutions for new Motor design requirements, test and analyze new metrology equipment for capability, measurement technology transfer to motor development partners and cross train metrology staff on new measurement system.
- Created Mathematical models to predict measurement sigma and developed and patented cost effective sub-micron metrology systems that are not readily available in the market
- Developed metrology solutions such as "Alternatives to Cylindricity measurements" that eliminated the need for buying expensive measurement systems

KLA-Tencor - Milpitas, CA

Staff Systems Engineer

2000 - 2001

- Worked on the characterization of iModule (Integrated Wafer Metrology) X-Y staging system. Tasks included test plan development, measurements of Linear, Angular and thermal errors, velocity stability and settling time characteristics using laser interferometer and development of hardware and software for stage characterization

CyberOptics Corporation, Golden Valley, MN

1994 - 2000

Sr. Test Engineer/Product Assurance Manager

- Responsibilities included planning and execution of performance verification tasks to ensure compliance of new and modified products with the stated specifications prior to the product release.
- Manage Metrology lab functions and represent CyberOptics on ANSI/ASME B89 standard committee.
- Lead development of test stations, calibration artifacts, custom software analysis tools, System and Sensor Field certification packages
- Worked on X-Y staging and motion system analysis
- Lead the development of product specifications

PPL, Inc. (JMAR), Chatsworth, CA

1992 - 1994

Applications Engineer

- Developed methodology and application programs on PPL vision metrology systems for dimensional inspection and SPC of various components from semiconductor, disk drive, bio-medical & automotive industries
- Lead engineer in the joint development of IC Wire Bond inspection with Motorola.

NIST-US Department of Commerce, MD

1991 - 1992

Guest Researcher

- Developed, simulated and implemented a software error compensation algorithm for VIEW Precis 3000, a vision based CMM.
- Verified the scheme, by measuring all parametric errors of the system using laser interferometer and electronic levels

Education

M.S. (Mechanical Engg.) 1993

Concentration: Precision Engineering/Metrology

University of North Carolina at Charlotte, NC

B.E. (Mechanical Engineering) 1989

Bangalore University, India

Patents & Publications

- [Sapphire Alignment Fixture](#), Patent No. US 7,421,795, September 9, 2008
- [Sleeve cone angle measurement system](#), Patent No. US 7,350,308, April 1st, 2008
- [Shaft cone Metrology System & Method](#), Patent No. US 7,253,889, August 7, 2007
- [System and Method for ECM Land Erosion Metrology](#), Patent No. US 6,904,790 B2, June 14, 2005
- "Evaluation of High Precision Triangulation Sensors for Coordinate Measurement", ASPE 10th Annual Meeting, 1995
- Analyzing Measurement Systems: "Using Machine Vision for better wire bonds", Advanced Packaging, May/June 1994

-
- "Residual Error Compensation of a Vision Based Coordinate Measuring Machine", Proc. of the ASPE Annual Meeting, 1993
 - Total of 4 approved and 2 pending patents
-

Projects

Lead Engineer on the development of:

- Cone angle Vision & Contact metrology systems
- Small diameter and short length measurement system
- DRS and Laser align sensor Alpha test stations
- Automatic IC wire-bond inspection system
- System & Sensor Field Certification Packages

Software Skills

LabVIEW, NI-IMAQ Vision, Visual Basic, MiniTab, MS-Office and Metrology Software Packages, NI Certified LabVIEW Associate Developer

Professional Activities & Awards

- Advisor for SME's 2008 & 2009 Nano Manufacturing Conference
 - Recipient of 2006 Seagate Technology "Outstanding Technical Inventions or Innovations" Award
 - Recipient of 1998 ASME B89 Award
 - Member of ANSI/ASME B89 Standard committee
 - Reviewer of Technical Journals and Project Proposals
-