Ming-I Lin

Moorestown, NJ - Email me on Indeed: indeed.com/r/Ming-I-Lin/b8cee0125cde2d49

WORK EXPERIENCE

Senior Optical Scientist

Advanced Reconnaissance Corporation - Fishkill, NY - 2009 to February 2016

Fish Kill, NY
Optical hyperspectrum (VNIR, SWIR, LWIR) design, Telescope design,
Matlab and IDL programming. Zemax & ASAP software design, Solid Work & FEA mechanical design..

2003-2009 Independent research and Export machine business.

Principal R&D Engineer

LEICA INSTRUMENTS PTE LTD - 2002 to 2002

Designed lens systems for microscope and telephoto range system using Zemax.
Utilized Matlab to study the color barcode imaging processing in CMOS sensor.

Senior Optical/Software Engineer

BIOSEPARATIONS INC - Tucson, AZ - 2000 to 2001

Designed and wrote software of fluorescence microscope auto focus and auto scan using stepper and aligner, 3 CCD camera for medical cell
image.processing.

Senior Software/Automation Engineer

SPEEDFAM-IPEC INC - Phoenix, AZ - 1998 to 2000

Wafer polisher:
Endpoint detector applied fiber optics and spectrometer theory in order to detect endpoint in situ polish control.
Advanced process control (APC)
designed software for arm-to-arm and run-to-run polish control. Designed chemical
mechanical planarization models. Worked on SECS/GEM remote control systems.
Wafer cleaner:

Wrote programs for interfacing between wafer-cleaner and wafer-handler robotic
systems. Created user interface platforms using Wonderware In Touch. Developed
cleaner control using Wonderware In Control.

Electrical Engineer

CHEMCONT PRECISION CO - Cincinnati, OH - 1990 to 1998

Designed standard bus embedded computer for IR instruments. Wrote operating
system software and application system using C and assembly languages. PLC, Allen
Bradley SLC, ABB circuit breaker and instruments for power plants service.

Senior Optics physicist/IR instruments Research and Development Project

OHMART CORP - Cincinnati, OH - 1984 to 1990

Manager
Designed infrared instruments to measure and control multi-layer thin films in plastic

web processing line. Developed nuclear sensors and near infrared sensors to measure moisture for food, glass, and plastic industrial applications. Analyzed material using FTIR.

EDUCATION

Ph.D. in Physics
UNIVERSITY OF CINCINNATI - Cincinnati, OH

M.S. in Materials Engineering
RENSSELAER POLYTECHNIC INSTITUTE - Troy, NY

M.S. in Physics
UNIVERSITY OF DAYTON - Dayton, OH

ADDITIONAL INFORMATION

TECHNICAL SKILLS

Optics: Hyperspectrum (SWIR, VNIR, LWIR) design, Holographic system design, Optical instrument design, Lenses Design (Zemax, ASAP), FTIR, Fluorescence spectroscopy, Image processing, telescope and microscope lenses design, LCD micro display and projection light engine design.
Semiconductor Metrology: Interferometer, Spectrometer, Ellipsometer.
Software: Matlab, LabView, Visual Basic, Visual C++/MFC, C, Assembly Language, V+ Robotic, Wonderware In Touch, Wonderware In Control, SECS/GEM, PLC.
SAS (statistical analysis system), IDL, ENVI.
Electronic: Embedded microcomputer design, CCD/CMOS image sensor, OrCad SPICE, analog/digital circuit design.
Materials: Glass, metallurgy, ceramic, Polymer rheology and polymer processing.
Mechanical Design: SolidWorks, FEA.