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Human Resources

Dear Sir/Madam,

Reading your job description, I am very interested in this position, my background is a good fit. With 10+ years of experience in mechanical engineering, manufacturing, testing, including tooling & fixtures design, injection molding plastic parts, mechanical components design and drafting with Solidworks, Creo, NX and AutoCAD, environmental / mechanical testing and CNC machining plus a master's degree in mechanical engineering, I am able to make an effective contribution to your company.

I have worked as an advanced manufacturing engineer, senior mechanical engineer, tooling engineer and reliability test engineer in medical device industry, semiconductor industry, fiber-optic telecommunication industry, automotive industry and manufacturing field for years. I am knowledgeable and experienced not only in product design from conceptual architecture to production release, tooling and fixtures design, manufacturing processes, testing procedures, such as technical documents, design specifications, test report, ECN, BOM, and work instructions, but also in CNC programming and machining, designing 3D models, developing prototypes, generating 2D detail and assembly drawings, PCB & flex circuits layout. I am very familiar with GD&T, ASME/ANSI Y14.5, ISO standards, QC and QA in mechanical engineering, also have working knowledge in Oracle/Agile PLM & CM, Solidworks ePDM, FEA, SAP, NPI, ISO 9001, 13485, 14971, FDA 21 CFR Part 820, MDD 93/42/EEC. I firmly believe that I can do the job effectively and become a valuable asset of your company.

Thank you for taking the time to review my resume. I would appreciate a chance to discuss my background with you. I can be reached at the e-mail or phone number above to arrange an interview at your convenience. I look forward to hearing from you.

Sincerely,

Charles Yao (U.S. Citizen)

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### **SKILLS SUMMARY**

- Over ten years of experience in mechanical, fabrication, tooling, fixture, test engineering
- Good knowledge of DFM, DFA, quality, assembly, prototype, enclosures, package, NPI
- Proficiency in software: Solidworks, Creo, NX, AutoCAD, MasterCAM, CNC, CMM
- Knowledgeable about FDA regulations, ASME Y14.5, ISO, SAP, PLM, PDM, GD&T
- Working knowledge in ISO 9001, 13485, 14971, FDA 21 CFR 820, MDD 93/42/EEC
- Strong documentation, presentation, interpersonal, oral and written communication skills
- Excellent work ethic, a friendly team player, desire to learn and contribute, quick learner

#### PROFESSIONAL EXPERIENCE

# Advanced Manufacturing Engineer/Mechanical Engineering

Keysight Technologies Inc, Santa Clara, CA

Nov. 2022~Present

- Collaborate closely with cross-functional team for developing, designing, manufacturing, testing
- Analyze, optimize manufacturing processes to improve efficiency, quality and cost-effectiveness
- Work with in/external partners to ensure manufacturability & DFA for ASML & Zeiss projects

# Senior Mechanical Design Engineer, (Contract)

Thermo Fisher Scientific Inc, Sunnyvale, CA

Aug. 2022 ~ Nov. 2022

- Worked on prototype development, assembly instruction, verification and validation, CMM
- Created design documentation including specs & drawings required for manufacturing

#### Mechanical Design Engineer, (Contract)

ASML, San Jose, CA

Sept. 2021 ~ Aug. 2022

- Worked on semiconductor capital equipment with designing tooling and fixture for prototypes
- Led a design team offshore, transfer design & manufacturing projects between US and Asia

### Design Engineer, R&D (Contract)

Johnson & Johnson Surgical Vision, Inc., Santa Ana, CA

Jan 2021 ~ May 2021

- Worked in products developing, documentation, Solidworks 3D & 2D, ePDM, Agile PLM
- Collaborated with cross-functional teams including quality, systems, test, verification, etc.

# Senior Mechanical Design Engineer, R&D

Zollner Electronics, Inc., Milpitas, CA

Dec. 2017 ~ March 2020

- Worked in all products' developing stages, modeling, drawings, prototype, define, test, fixtures
- Interacted with cross-functional teams, verification & validation, production plan & instruction
- Transferred prototypes to China plant with all documents, Solidworks, Creo, PDM, DFM/DFX

# **Senior Mechanical Engineer (Contract)**

Advantest Corporation with Technical-Link, San Jose, CA

June 2017 ~ Dec. 2017

- Designed system level components to integrate subassemblies into major machine level
- Created interface components among major level and sub-assemblies with Solidworks

#### **Senior Mechanical Engineer (Contract)**

Altierre Corporation, San Jose, CA

Nov. 2016 ~ June 2017

- Designed injection molding plastic and sheet metal parts, assembling mechanical system
- Created 3D models, 2D drawings, PCBA & flex circuits layout, simulation with Solidworks
- Developed new products from conceptual, thermal, prototyping to production with vendors

# Senior Mechanical Engineer, R&D (Contract)

ReVera Inc with Zelos Consulting, Santa Clara, CA

Jan. 2016 ~ May 2016

- Verified and simulated new design of semiconductor capital equipment with validation
- Designed tooling and fixtures, supported R&D, NPI, documents with Solidworks EPDM

## **Manufacturing / Tooling Engineer (Contract)**

Medtronic Inc with Real Staffing, Warsaw, IN

Sept. 2014 ~ Sept. 2015

- Developed and designed gages, fixtures and tooling for production with Creo and Windchill
- Improved fixtures and tooling to enhance parts' quality and reduce manufacturing costs
- Worked with production team to analyze products' design with manufacturability quality
- Verified and simulated existing products and process, documentation with Agile PLM

# Mechanical Engineer, R&D

Optoplex Corporation, Fremont, CA

Aug. 2012 ~ Jan. 2014

- Conceived electro-opto-mechanical prototype, parts with ECO, BOM and work instruction
- Designed and aligned fixtures for R&D and production, inside and outside clean room
- Managed projects from concept to production, worked with vendors for quality issues
- Supervised a CNC operator to support R&D projects and production requirements

# Reliability / Environmental Test Engineer

Quanta Laboratories, Inc., Santa Clara, CA

Jan. 2010 ~ July 2012

- Verified and validated the products of clients with executing tests, generated reports
- Implemented mechanical and environmental tests for medical device, electronics, chips, solar elements, optical fiber and their packages, such as sine sweep and random vibration, thermal, HALT, shock, drop, acoustic, simulating of transportation, seismic tests

#### **CNC Operator**

Magna International Inc, Pullmatic Manufacturing Division, Toronto, Canada

 $2004 \sim 2007$ 

- Programmed planning requirements & engineering procedures with MasterCAM
- Verified CNC programming tool path with Solidworks to debug the programming
- Supported the manufacturing floor to optimize cycle time and minimize down time
- Implemented statistical process control(SPC) and conducted process capability studies

### **CNC Programmer**

North American Tool & Die Ltd, Port Colborne, Canada

2003 ~ 2004

- Created tool path with detail drawings and programmed for CNC machining
- Set up and managed company drawing database with ISO 9001 requirements
- Checked and verified engineering drawings with Solidworks, AutoCAD, ANSI, ISO
- Programmed to manufacture tools and dies, operated CNC lathes, mills and grinder

## **EDUCATION**

- Master Degree in Mechanical Engineering, University of Waterloo, Canada
- Bachelor Degree in Mechanical Engineering, Southeast University, China
- Technical diploma in Mechanical CAD/CAM(CNC), Centennial College, Canada

### **OTHER**

- U.S. Citizen;
- Willing to travel if required
- Bilingual in English and Chinese Mandarin
- Lean Manufacturing, Six Sigma, 5S, ISO 9001, Agile PLM & CM, Solidworks ePDM
- References available upon request