

## PROFESSIONAL EXPERIENCE

### **INTENSE, INC.**

North Brunswick, NJ

#### **Electro-Mechanical Engineer, 2014 - 2015**

Contributed to the design, development, and production process of semiconductor lasers.

#### **Primary Functions**

- Working with customers and vendors to coordinate the development of product package design specifications.
- Designed laser product components, fixtures, and jigs via SolidWorks 3D CAD.
- Programmed and maintained automated assembly equipment including the Palomar Die Bonders, ASM Wire Bonders, and UniTemp Reflow Ovens with close analysis of existing processes of production.
- Monitored production and inventory for diode lasers including mounting laser arrays, photo diodes, ASICs, and micro components.

### **TRUMPF PHOTONICS**

Cranbury, NJ

#### **Lead Technician/Engineering, 2011 - 2012**

#### **Production Technician, 2009 - 2011**

Responsible for daily diode laser production within the Mounting & Testing group.

#### **Key Accomplishments**

- Performed as interim process engineer during the absenteeism & turnover of a process engineer.
- Created, reviewed, and refined work instructions for SAP/database transactions and tool operation.
- Restructured the M&T Kanban cycle to optimize the production process.

#### **Primary Functions**

- Coordinated the daily tasks across two shifts to deliver optimal productivity.
- Monitored product quantities and specifications to evaluate availability and goals.
- Implemented monthly 5S workshops for continuous improvement in the cleanroom work environment.
- Troubleshoot production tools including of SET FC250, Sikama Oven, K&S Wire bonder, Telops Tester & Burn-In, and Centrotherm Oven.

## EDUCATION & QUALIFICATIONS

### **MANCHESTER METROPOLITAN UNIVERSITY**

Manchester, England

#### **Master of Science, Mechanical Engineering, May 2014**

Thesis: Small Wind Turbine Design w/Bladed v4.3 - Tested the capabilities of Bladed v4.3 and verified its CAE accuracy.

Courses: Computer Aided Fatigue Analysis, Finite Element Analysis, Integrated Management Systems, Measurement Systems, Product Design and Development, Simulation of Mechanical Systems.

### **RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY**

New Brunswick, NJ

#### **Bachelor of Arts, Physics, May 2011**

Engineering Related Courses: Multivariable Calculus, Differential Equations, Classical Mechanics, Electromagnetism, Thermodynamics, Quantum Mechanics, Modern Optics, Computer Based Experimentation, Modern Instrumentation, and Engineering Mechanics.

## FUNCTIONAL SKILLS & COMPETENCIES

- Proficient with MS Office suite, SAP, SolidWorks 3D CAD, LabVIEW, ANSYS, nCode DesignLife, Adams.
- Experienced in Kanban principles, 5S (kaizen) methodology and ManageAssist.
- Used oscilloscopes, pattern generators, spectrum analyzers, power supplies, multi-meters, hot plates, microscopes (stereo and compound), soldering irons, and foam cutters.
- Basic conversational Chinese and Spanish.