

PROFESSIONAL EXPERIENCE

GENERAL ASSEMBLY

New York, NY

Teaching Assistant, 2016

Supported the academic success of the Android Development Immersive students.

- Reviewed the concepts of Android Development (Java, XML, etc.).
- Encouraged growth and excitement in the learning of material.
- Guided the creativity of students' design work.

INTENSE, INC.

North Brunswick, NJ

Electro-Mechanical Engineer, 2014 – 2015

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

- Worked 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.

- 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.
- 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.

MULTIPLEX INC.

South Plainfield, NJ

Testing Technician, 2006-2009

Implemented testing standards and procedures to ensure that product met customer requirements

- Ran test and burn-in procedures on electro-absorption modulated lasers (EMLs)
- Used pulse generator, oscilloscope, spectrum analyzer, and error detector
- Collected, evaluated and stored test data of completed EMLs
- Generated lab reports of EMLs and communicated test results
- Trained entry-level technician in testing procedures

EDUCATION & QUALIFICATIONS

GENERAL ASSEMBLY

New York, NY

Certificate, Android Development, 2016

- Built Android apps from scratch through iterative design and development sprints.
- Coded apps with Java and XML through Android Studio.
- Created intuitive interfaces with Google's Material Design guidelines.
- Connected apps to third party APIs and services.
- Worked in teams using Git merging.

MANCHESTER METROPOLITAN UNIVERSITY

Manchester, England

Master of Science, Mechanical Engineering, 2014

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

MASTER'S DEGREE COURSE PROJECTS:

- **Computer Aided Fatigue Analysis**
Used Adams and nCode DesignLife to design and determine fatigue on a notched beam.
- **Finite Element Analysis**
Used SolidWorks to design and test an elastomer for use in a metal forming punch process.
- **Integrated Management Systems**
Developed and applied ISO 9001, 14001, and 18001 standards to a fictitious company.
- **Measurement Systems**
Designed and calibrated a digital thermometer using LabVIEW and an RTD.
- **Product Design and Development**
Designed and developed a simple tool starting from sketches, to foam modeling, and finishing with a 3D SolidWorks model.
- **Simulation of Mechanical Systems**
Used ANSYS Fluent to design and determine the efficiency of a wall heater vs. a UHF induction heater in the same room. Also virtually designed and validated a Whitworth quick return mechanism.

RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

New Brunswick, NJ

Bachelor of Arts, Physics, 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 Java, XML, JavaScript, 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, foam cutters and forklifts.
- Basic conversational Chinese and Spanish.