

## Manh Nguyen

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Degree of Bachelor of Science with a Major in  
**Mechanical Engineering** from **University of California, Davis**  
December, 2012

**Certifications:** Engineer in Training (EIT) certified by the California Board of Registration for Professional Engineers, Land Surveyors, and Geologists

### **Skills and Background:**

- Excellent mechanical engineering background
- Excellent communication and organization skills
- Self-motivated, Hands-on, Quick learner, Attention to detail
- Self-confident, Comfortable with equipment, Team oriented

### **Computer Programming Experience:**

- Agile, AutoCAD, AutoCAD Inventor, C ++, ESPIRT DP Technology, Granta CES Selector, LabView, MATLAB, Microsoft Word Excel PowerPoint, SolidWorks

### **Academic Engineering Experience:**

**Project Design Engineer** at **UC Davis Engineering Design Showcase** in **Davis, CA** where the responsibilities involved:

Team of 5 designed, developed, and produced an Airflow Delivery System for illegal contraband detection in open air environments from a previous prototype.

- Responsible for planning events for the completion of the design
- Applied manufacturing and analytical/trouble-shooting techniques to effectively manage and complete the project
- Assisting in creating and updating AutoCAD Drawings
- Created the Bill of Materials and responsible for all revisions
- Assisting in the material selection process using Granta CES Selector
- Responsible for writing the user manual for the design and technical justifications for relevant engineering decisions
- Performed static, mechanics of materials, and fluid mechanics analysis using AutoCAD Physics Simulation
- Performed testing to ensure product specifications are met
- Communicating with customer to inquire needs for design

### **Engineering Equipment Experience:**

- Mill, Lathe, Drill press, Welding, CNC, Belt sander, Polishing, Machine Shop tools
- Rockwell, Brinell, Vickers Hardness Testing
- Precision instruments: Micrometers and Calipers

### **Work Experience:**

- **Mechanical Inspector** at **ETM-Electromatic Inc.** in **Newark, CA** Jan 2014 – June 2014  
[www.etm-inc.com](http://www.etm-inc.com)
  - Manufacturing quality control; ensure incoming/outgoing finished material parts conforms to requirements; ETM is certified to both AS9100 and ISO 9001:2008 standards
    - Dealing with engineering drawings (GD&T)
      - ❖ Ability to interpret the engineering drawings and physical parts and to identify any discrepancies; both in 2D and 3D model drawings; accept or reject materials/product inspected, based on conformance to acceptance criteria (e.g., geometric dimension and tolerance, material type, hole diameters, tap sizes, material plating)

- ❖ Conduct first article inspections (FAI); ensuring parts conform to the FAI standards
- ❖ Engineering change order (ECO) of drawings; Using AutoCAD and SolidWorks to update drawings (using Agile) to fix complications in manufacturing
- ❖ Collaborate with engineers; Analyzing problems and providing engineers with insight on issues (e.g., errors on drawings, non-conforming parts, tolerance stack-up, design parameters)
- ❖ Measurement tools including calipers, micrometers, flat bars and gauges
- Additional duties include:
  - Use of a drill press, manual belt sander and manual mill, other machine shop tools
  - Daily use of machinery in low production environment; milling and fly-cutting potting and aluminum material to specified dimensions
  - Writing work instructions for modified parts
- Temp contract job, Resigned the position to seek other opportunities
- **Consultant at HumRRO in Monterey, CA** July 2013 – Feb 2014  
[www.humrro.org](http://www.humrro.org)
  - Development of Mechanical Comprehension test items for the Armed Services Vocational Aptitude Battery (ASVAB) aptitude test
  - Problems are derived from research and creativity
  - Items include:
    - Basic Compound Machines (e.g., gears, cams, pistons, cranks, linkages, belts, chains)
    - Simple Machines (e.g., levers, planes, pulleys, screws, wedges, wheels, axles)
    - Mechanical Motion (e.g., friction, velocity, direction, acceleration, centrifugal forces)
    - Fluids and Gases (e.g., hydraulic pressure, siphoning, change of states, atmospheric pressure, flow, Archimedes' and Bernoulli's Principles, nozzles and faucets, compression)
    - Properties of Materials (e.g., weight, strength, expansion/contraction, absorption, center of gravity)
    - Structural Support (e.g., braces, beams, struts, trusses, cantilevers, walls, arches, supports)
  - Temp contract job, ended February 1, 2014
- **Handler at FedEx Express in Union City, CA** Sept 2007 – Sept 2009
  - Ensure packages are offloaded within specific scheduled times
  - Forklift operation
  - Scanning and storing packages in inventory
  - Part-time, Worked while in school
  - Resigned the position to focus on school