

Nicolas Hernandez

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Highlights

- Designed and physically built electromechanical automated devices for sophomore and senior projects.
- Learned elements of electrical engineering, process engineering, and trades work at my first job.
- Self-developed to employ manufacturing root cause analysis, team supervision & management, technical communication, automotive customer service, and adherence to changing standards at my second job.

Education

B.S. Mechanical Engineering

May 2017

Georgia Institute of Technology, Atlanta, GA

A.S. Physics

May 2014

Dalton State College, Dalton, GA

Professional & Academic Experience

Georgia Institute of Technology, Mechanical Engineering Curriculum

- ***Creative Decisions & Design, Fall 2015*** – Custom-built, programmed, and machined components for robotic devices that achieved assigned competition goals, all done in a team setting.
- ***Experimental Methods, Spring 2017*** – Used sensors & measurement devices to acquire data sets to then find performance parameters, system conditions, and maintenance & engineering implications.
- ***Energy Systems Analysis & Design, Spring 2017*** – Designed and reported ROI metrics for a concentrated solar power system made from the ground up, heavily incorporating scientific principles and using price quotes obtained from actual supply vendors.
- ***Mechanical Engineering Capstone Design, Spring 2017*** – Created an electromechanical safety braking system in a team-based setting. Project commissioned & overseen by Emrgy, Inc.

Kobayashi American Manufacturing, Production Engineering Technician – October 2017-December 2018

Support production & maintenance processes while driving continual improvement, using and learning principles of trades work & process engineering.

- Studied & designed implementation for a working Internet of Things system.
- Wired and programmed control electronics for manufacturing systems.
- Learned manufacturing processes & product needs from multiple levels of analysis.
- Communicated with vendors and end-user personnel to specify project needs.
- Performed manual maintenance & otherwise unassigned support tasks for company infrastructure.

Gestamp Chattanooga I, Quality Engineer – Began December 2018

Drive quality processes in an automotive manufacturing environment.

- Employed root cause analysis & technical communication across departments to diagnose and rectify the manufacture of defective products.
- Managed & supported floor-level sort teams for defective product containment, across multiple facilities.
- Provided a point of communication for external customer concerns and internal quality criteria.

Skills

Instrumentation: Assembly & Wiring for Sensors & Control Units, General Mechanic & Electrician Tools, incl. Electric Testing (Multimeter, Oscilloscope, Function Generator), Part Machining (Mill, Lathe, Power Tools)

Computers & Software: Controller Programming (PLCs/Ladder Logic, PACs, LabVIEW, MyDAQ, MyRIO), CAD, Microsoft Office, Computer Programming (Java, MATLAB, HTML/CSS/JavaScript)

Design: Team Design & Prototyping, Drafting & Design Documentation, Return on Investment Justification, Market Research, Technical Research, Vendor & End-User Correspondence, Technical Writing

Analysis: Electrical/Mechanical/Software Troubleshooting, Blueprint & Schematic Reading, Goal-Oriented Experimentation, Mechanical Stress Analysis, Safety & Failure Mode Analysis, Thermodynamic & Fluid Analysis, Circuit & Signal Analysis, Automation & Control System Analysis & Implementation