**Nathan L. Robinson Zavala**

Brooklyn, NY | <http://bit.ly/portfolio-nathan> | <https://www.linkedin.com/in/nathan-robinson-09316844/>

**EDUCATION**

**New Jersey Institute of Technology**, Department of Mechanical and Industrial Engineering, Newark, NJ **05/2017**

Bachelor of Science in Mechanical Engineering

**NCEES,** Passed FE Mechanical Exam **11/2017**

Verifiable Link: <https://account.ncees.org/rn/1827959-1056921-05c3a89>

**TECHNICAL SKILLS**

Working proficiency in Microsoft Excel, Microsoft Project, Jira, Confluence, Visio, SketchUp, SolidWorks (2016), Creo 3.0 (PTC), Minitab 17.2 (Minitab Inc.), Pro/Engineer Wildfire 3.0 (PTC), AutoCAD, VidCAD, Matlab R2014 (Mathworks), ANSYS, Autodesk Simulation Moldflow Advisor 2015, HTML5, CSS3, JavaScript

**COURSEWORK**

Mechanical Vibrations, Conditioning Monitoring, Research and Development, Fluid Mechanics, Tribology, Thermodynamics, Manufacturing Process, Heat Transfer, Strength of Materials, Machinery Design, Finite Element Analysis, Refrigeration Performance, Aerodynamic Design

**PROJECTS**

**Mechanically Activated Fishing Hook 05/2017**

* Worked with a team to design a novel mechanical fishing hook that would facilitate the process of releasing a captured fish from the hook by means of a spring loaded retractable sleeve. I took on major tasks such as designing and optimizing various parts of the assembly using SolidWorks FEA simulations.
* My team and I scheduled, reported and presented in great detail our design process including concept down select, tackling problem description, existing patents, proposed solution, supporting research, formulaic analyses, finite element analyses, design solution/performance, process discussion and final conclusions.

**Performance Test of a Vapor Refrigeration Cycle 04/2017**

* Tested and calculated various fan air flow speeds using a digital anemometer to evaluate the performance of a basic vapor cycle.
* Recorded and examined temperature and pressure values with gauges located at the inlet and outlet of the compressor, expansion valve and both heat exchangers.
* Analyzed and compared in detail each tests performance results, while discussing the pros and cons of each air mass flow rate setting and how this affected the heat exchangers efficiency.

**Injection Molding Evaluation: Telephone Housing 11/2016**

* Simulated and analyzed the mold cavity liquid polymer flow for an injection molded telephone housing CAD model using Autodesk Moldflow 2015. Detailed process control was achieved by modifying control factors such as material resin selection and mold temperature specifications.
* Evaluated and optimized the injection molding process regarding mold temperature, gate location, fill time, confidence of fill, weld line locations, air trap locations, skin orientation, part shrinkage, and part warpage.
* Reported in detail the full evaluation comparisons of the initial and final optimized molding processes.

**WORK EXPERIENCE**

**Viagogo,** New York, NY  **06/2017 – Current**

*Seller Support Agent*

* Communicate with Sellers based in North and South America in Spanish, English and Portuguese, through a secondary ticket marketplace platform.
* Correspond via email regarding ticket support and selling procedures resulting in the satisfaction of hundreds of sellers.
* Create and integrate new policies and procedures pertaining to Latin American and US market.
* Troubleshoot and diagnose technical issues with accounts and website.

**Newark Institute of Technology,** Newark, NJ **08/2013 – 10/2014**

*Phonathon Caller*

* Gained experience in handling people over phone, as potential donors.
* Created opportunity of maintaining alumni connected to their alma matter by informing them about upcoming events and reunions.
* Assisted with organizing with new employee training programs and team discussion meetings.

**Aldea Azul,** El Naranjo, SLP, Mexico **09/2011 – 07/2013**

*Engineering Intern*

* Reduced operating costs by assisting in assembly, design and maintenance of the deep water catfish and tilapia river cages and over watching the pump and siphon water distribution system for any failure.
* Responsible for up keeping the livestock health and weight through daily scheduled feeding and dosing of anti-bacterial medicine into the river cages and artificial ponds.