

Nickolas Santi

29211 Sherry Ave Madison Heights, MI 48071 • nicksanti31@gmail.com • 586.651.0342

EDUCATION

Oakland University – MS in Engineering Management
Michigan State University - BS in Mechanical Engineering

Expected Grad May 2022
August 2014 – May 2018

ENGINEERING EXPERIENCE

Hirotec America – Standard Product Project Engineer

June 2018 – Present

- Work with designers, sales, R&D, and service teams to improve standard hem presses with a focus on value engineering and design for manufacturability,
- Check, validate and release details and components, then guide the build process and field support throughout the life of the tools,
- Design and release custom tools based on customer requirements and applications,
- Work to create and continuously improve supporting documentation (MFMEA, R&M, FEA),
- Manage company library of standard details, assemblies, and documentation for hemming and tooling systems,
- Three years as internal auditor, two as a lead auditor to ensure ISO 9001 certification.

Leoni EPS – Mechanical Engineering Intern

May 2017 – August 2017

- Used SolidWorks to develop machine vision system solutions and provided hands-on fabrication support,
- Worked on several projects, all of which had customer set time constraints,
- Developed skills in effective workplace communication, problem solving, and Machine Vision Systems.

Sympill – Product Development Intern

April 2016 – June 2016

- Assisted with the design and development of a unique pill delivery system for a startup company,
- Gained valuable experience with 3D printing and adhering to limited budgets,
- Resulted in a US Patent, No. 10,004,664.

MSU Nanomaterials Laboratory – Professorial Assistant

August 2014 – May 2016

- Assisted the development of nanosensors that can detect plant volatiles in minute amounts,
- Designed and build an apparatus to catch winged aphids from the front of a UAV as well as a system to effectively test rGO nanosensors as accurately as possible,
- Presented findings titled “*Collection and Analysis of Winged Aphids and Plant Volatiles Using UAV Mounted rGO Nano Sensing Technology*” at MidSURE 2015.

RELEVANT ACADEMIC PROJECTS

Mechanical Engineering Senior Capstone

January 2018 – April 2018

- Led the design effort to conceptualize and model a fully automated system to reduce assembly time and scrap for a prominent dental floss manufacturer,
- Gained experience designing and analyzing mechanical systems, as well as analyzing the financials of building the system.

Biomedical Device Design Project

January 2018 – April 2018

- Worked on a cross functional team of engineers and marketers to take a stair fall prevention device from a concept to a commercial prototype,
- Gained experience doing market research and surveying potential users.

NAMA Design Competition

April 2016

- Conceptualized and designed an innovative vending machine, presented at 2016 NAMA conference.

SKILLS AND INVOLVEMENT

- SolidWorks, NX, AutoCAD, Microsoft Office, MatLab
- MSU STATE Scholarship

