# **Nathan Ryley Tharp**

## **Entry Level Mechanical Engineer**

903-253-4987 | nrtharp24@gmail.com | Tyler, TX nrtharp.github.io | linkedin.com/in/nathan-ryley-tharp

#### **SUMMARY**

Performance driven recent mechanical engineering graduate with years of diligent work experience and passionate about product development, efficient manufacturing, and the future of technology; seeking a new opportunity.

## **SKILLS**

LeadershipProject ManagementSolidWorks, Creo, InventorTeamworkFinite Element AnalysisANSYS, MATLAB, LabVIEWCommunicationProfessional PresentationsMicrosoft Office Suite

Adaptability Technical Report Writing Python, C++

#### **EDUCATION**

University of Texas at Tyler, Graduation Date: May 2, 2020 Bachelor of Science in Mechanical Engineering

## **EXPERIENCE**

University of Texas at Tyler (Tyler, TX)

#### **Engineering Team Lead – Robotic Walking Training Device**

- · An electro-mechanical rehabilitation device was designed and optimized using CAD modeling software resulting in an effective and adaptive medical apparatus which could aid patients with spinal cord injuries
- Verified customer specifications using finite element analysis (FEA) in SolidWorks and ANSYS and led a design review showing that the product exceeded requirements by nearly 200%
- · Effective communication, implementation of six sigma methodology, and an excellent teamwork resulted in the project being completed on schedule and 30% under budget

## **Engineering Team Lead - Powered Lift**

- Designed with SolidWorks to be robust in order to lift the maximum amount of weight; this was achieved, and it won in competition against 10 teams for capacity, design, and quality
- · Project remained within budget and ahead of schedule due to effective project management
- · Costs were kept low by networking with vendors and using the individual strengths of the team members

## **Engineering Team Lead – Walking Robot**

- Designed, assembled, and wired a 6-legged walking robot for both speed and agility which earned 1st place in competition against 8 teams by traversing a course the fastest
- · Completed project 1 month ahead of schedule due to excellent team coordination, allowing for further optimization and providing the edge necessary to overcome the design of other teams

Centene Corporation (Tyler, TX)

#### **Advanced Claims Analyst**

- · Used Microsoft Office to analyze payments of medical insurance claims often exceeding \$1,000,000 daily
- · Completed claims up to 3x faster than others in the department while maintaining greater than 99% accuracy MotoPhoto Portrait Studio and Photo Lab (Tyler, TX)

## **Lead Lab Technician**

- · Maintained high volume industry grade printers, ensuring continued function and productivity
- · Performed meticulous quality assurance on all customer projects, leading to community trust and repeat business for this small company and resulting in annual profits of more than \$300,000

#### 21st Century Systems (Katy, TX)

#### **Installation Technician**

- · Installed high performance home theater systems with budgets for the projects often exceeding \$50,000
- · Wired and installed various integrated devices and trained customers on both operation and maintenance