Nathan Ryley Tharp

Tyler, TX | NRTharp24@gmail.com | 903-253-4987
nrtharp.github.io | linkedin.com/in/nathan-ryley-tharp

OBJECTIVE:

Motivated, dedicated, and reliable recent mechanical engineering graduate pursuing an immediate position with an innovative engineering company and willing to relocate. Seeking to integrate 18 years of diligent work experience with engineering skills from academic and freelance projects to further a passion for the advancement of mankind.

SKILLS:

SolidWorks and AutoCAD	Engineering Design	Leadership and Decision-Making Skills
ANSYS Fluent and MATLAB	Systems Analysis	Strong Work Ethic and Teamwork Skills
GD&T	Product Assembly	Outstanding Presentation Skills
Microsoft Office Suite	Technical Reporting	Exceptional Written and Verbal Communication
Programming	Troubleshooting	Self-Starter and Self-Teacher

EDUCATION:

University of Texas at Tyler, Tyler, Texas — Graduated: 05/2020

Bachelor of Science in Mechanical Engineering – Cumulative G.P.A.: 3.4

EXPERIENCE:

University of Texas at Tyler (Tyler, TX)

Team Lead – Gait Rehabilitation Device, 07/2019 – 05/2020

- Conducted research in the bio-mechanical field and found that the market was lacking rehabilitation hardware at an affordable cost for victims of stroke or spinal cord injury
- Developed manufacturing strategies for an electro-mechanical system using 2D and 3D CAD modeling software, consisting of electric motors, aluminum linkages, and microcontrollers
- Verified customer specifications using FEA techniques in ANSYS and SolidWorks
- Generated documentation and developed presentations for training and design review using Microsoft Office Software Suite and SolidWorks Visualize, leading to a polished and professional demonstration
- Maintained a network of accountability in a multidisciplinary group and delegated specific tasks to ensure completion of deliverables ahead of schedule and within budget
- Self-taught SolidWorks, SolidWorks Visualize, ANSYS, and Autodesk Inventor to complete project to the high standard set for the team, and furthered a passion for design and analysis
- Completed project on schedule and 40% under budget despite setbacks due to Coronavirus

Team Lead – Powered Lift, 01/2019 – 05/2019

- Designed and manufactured a powered jack that lifted 100 times more than the minimum requirement leading to the team earning 1st place against 10 competing teams
- Project remained within budget and ahead of schedule due to networking and effective management

Team Lead – Walking Robot, 08/2018 – 12/2018

- 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
- Enjoyed overcoming obstacles, as well as gaining experience in robotics which aided in future endeavors
- Completed project 1 month ahead of schedule due to excellent team coordination, allowing for further optimization and providing the edge necessary to supersede the design of other teams

Team Lead – CO2 Sensor, 08/2018 – 12/2018

- Developed a CO2 sensor which managed airflow into a room by manipulating a damper for use in demand control ventilation systems for the HVAC industry, leading to greater efficiency and lower consumer cost
- Self-taught Arduino coding language and developed an excitement for programming which persists to today

Team Member – Cable Camera, 01/2018 – 05/2018

- Assisted in development of a cable camera for use in recreational or professional videography
- Generated a design presentation video to convey design, specifications, and uses to customers
- Utilized outside resources to learn Adobe Premiere Pro which increased quality of presentations