Nathan Ryley Tharp

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SUMMARY

Performance driven engineer seeking a new opportunity to utilize my unique skillset. Passionate about product development, optimization, and the future of technology.

SKILLS

Critical Analysis	Python and C++	SolidWorks
Teamwork	JavaScript	ANSYS, MATLAB, LabVIEW
Communication	AutoCAD	Logic Flow
Adaptability	Visual Studio	Microsoft Office Suite

EDUCATION

The University of Texas at Tyler, Graduation Date: May 2, 2020
   Bachelor of Science in Mechanical Engineering, GPA: 3.4

EXPERIENCE

HVAC Manufacturing and Technology (Athens, TX)
   Information Systems Project Engineer – 07/2020 - Present
·   Started as a Project Engineer in the Sales department and successfully generated more than $500,000 in revenue during the first quarter of employment
·   Promoted to Mechanical Engineer in the Research and Development division and developed submittal documentation templates, which were used to provide accurate information on a per-project basis while simultaneously reducing duplicate documentation and time required per document
·   Optimized Excel sheets which are used for products from initial budgeting through final shipment, and implemented these documents throughout the department, resulting in a net productivity increase of roughly 30%
·   Promoted to Information Systems Project Engineer and developed logic flows which are to be used company-wide optimizing all aspects of the business
·   Created a configurator tool which can configure each product using the logic dictated by the relevant technical specifications and utilizing API integrations to generate a BOM, quote, submittal documentation, and send pertinent information to procurement, production, and accounting teams using database structures
·   Created a user-friendly UI using HTML and CSS for the configurator and perform debugging as necessary
·   On a small team which oversees the web-presence of the company and makes amendments to the website as necessary
·   Updated and consolidated multiple databases to keep up with growing product lines while limiting the inputs required by various departments, reducing the overall required workload and potential for errors

University of Texas at Tyler (Tyler, TX)
   Engineering Team Lead – Robotic Walking Training Device – 06/2019 - 05/2020
·   An electro-mechanical rehabilitation device was designed and optimized using AutoCAD 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 excellent teamwork resulted in the project being completed on schedule and 30% under budget

   Engineering Team Lead – CO2 Sensor for Demand Control Ventilation – 08/2018 - 05/2019
·   A sensor and valve assembly were developed and programmed using Python to monitor carbon dioxide emissions, enabling the HVAC system to recirculate conditioned air while maintaining indoor air comfort (IAC) using a computer-controlled damper, thereby increasing efficiency while maintaining safety