

Jimmy Kgosi

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Github: <https://github.com/narcelhio/portfolio>

CAREER PROFILE

Ambitious Mechanical and Energy Engineering student at the University of North Texas, graduating in May 2025, seeking an entry-level Mechanical Engineer role focused on mechanical and system solutions. Skilled in AutoCAD and Matlab, I excel at generating innovative solutions in dynamic environments. I am scheduled to take the FE exam in December 2024 to further solidify my engineering foundation.

With over 8 years of industrial design experience across the U.S. and Africa, I have a proven ability to analyze mechanical designs, troubleshoot issues, and deliver precise, high-quality results. I am a motivated, team-oriented engineer with a passion for innovation and a strong focus on delivering sustainable energy solutions.

EDUCATION

University of North Texas | Denton, Texas

Expected May 2025

Bachelor of Science | Mechanical and Energy Engineering | ABET Accredited

GPA: 3.00

Relevant coursework: Fluid Dynamics, Heat Transfer, Data Analysis, Thermodynamics, System Dynamics & Controls

SUNY Schenectady County Community College | Schenectady, NY

Associate of Science | Nanotechnology Concentration and Material Science

Dec 2018

Relevant Coursework: Nanoscale Engineering, Mechanics Engineering, Material Science, Physics, Electrical engineering

TECHNICAL SKILLS

Programming Languages: MATLAB-Simulink (Advanced), C++ (Intermediate), Python (Beginner), CSS (Beginner), JavaScript (Intermediate), HTML (Beginner), SQL (Intermediate)

Software: Solidworks | AutoCAD | Inventor | CATIA | Catia | Microsoft Office Suite (Excel)

Manufacturing: CNC machining, packaging equipment, lathes, drills, welding,

Operating Systems: Windows, Linux, MacOS, Android

Certifications: 100 Days of Code: The Complete Python Pro Bootcamp (Udemy)

Languages: English, French (Advanced), Portuguese (Advanced), Spanish (intermediate)

Leadership skills: Team-oriented, attention to detail, time management, creative problem solver

ENGINEERING PROJECTS

Pizza Box Folding Machine | Senior Design/Capstone Project

August 2024 – Present

- Drawing package-CAD designed schematics of the lift and other components
- Presented group updates via Zoom to UNT faculty and sponsors on a monthly basis

EMPLOYMENT/RESEARCH/INTERNSHIP EXPERIENCE

Equipment Packaging Engineer | Haskell | Frisco, TX | May 2023 – October 2024

- Spearheaded equipment packaging processes, ensuring safe transport and delivery of valuable machinery, achieving a 15% reduction in equipment damage during transport for food and beverage companies.
- Designed and optimized packaging solutions in collaboration with cross-functional teams, including engineering, production, and R&D, to implement new technologies and improve packaging efficiency.
- Conducted comprehensive script testing, rigorous analysis, and troubleshooting, contributing to software modifications that enhanced packaging processes.
- Continuously evaluated and improved packaging methods to minimize environmental impact and reduce costs, while maintaining high safety and quality standards.

- Participated in the scope development and implementation of new equipment, from initial planning through validation, ensuring alignment with business initiatives and quality improvements.
- Performed root cause analyses and corrective action investigations to drive process improvements, leveraging CMMS data and tracking cost reductions.
- Developed and enhanced standard operating procedures (SOPs) and preventive maintenance (PM) protocols to ensure sustainable packaging system performance.

Production Associate | Raytheon | Richardson, TX | September 2022 – May 2023

- Collaborated in the manufacturing production of components, ensuring effective communication with site leaders.

Project Engineer Co-op | GAF | Ennis, TX | Jan 2022 – August 2022

- Designed and manufactured plant necessities using Inventor, including catwalk frames, mechanical components, and pump motors.
- Evaluated load rates and interpreted pump curves to ensure efficient design through MatLab and CAD designed assessments.
- Coordinated with project requestors and contractors, monitoring project progress.
- Expert in optimizing steel manufacturing through cutting-edge automation and standardization, with comprehensive knowledge of heavy mill machinery and advanced production quality techniques.

Researcher | SUNY STEM Program | Schenectady, NY | 2015 – 2018

- Researched industrial mechanics to enhance battery charge in electric vehicles through pneumatic/dynamo technology.
Designed a transmission core with a capacitor to convert waste energy, contributing to battery efficiency

LEADERSHIP & PROFESSIONAL STUDENT ORGANIZATIONS

SUNY Polytechnic CNSE: Mechatronics Certification and Photovoltaic Technology Certification at SUNY	May 2017
SUNY: Certified achievement in water research SUNY 2017 STEP conference	May 2017
UNT: Robotic Certification	Expected: May 2025

HOBBIES EXPERIENCE

Dancing, Cooking, Language Learning, Wood crafting