Natalia Figueroa

nataliafigueroa589@gmail.com | (630) 6440003 | Chicago, IL | www.linkedin.com/in/natalia-figueroa-099136265

EDUCATION

May 2028 **University Of Illinois Chicago** Chicago, IL
- Major: Mechanical Engineering, GPA: 3.78/4.00

May 2026 **College of DuPage (Graduated)** Glen Ellyn, IL
- Associate in Engineering Science, GPA 3.94/4.00

SKILLS

Modeling Skills: Revit (Training), CAD, Solidworks
Technical Skills: Python, FMEA, Experimental Testing
Data & Research: Data Analysis, Data Visualization, Leadership, Public Speaking

ENGINEERING EXPERIENCE

Jun 2023- Aug 2026 **Ewert Energy Systems, Inc (Full-Time)** Carol Stream, IL
Engineering Research And Development Associate

- Designed and executed laboratory simulations and field tests for electric-vehicle battery management systems, validating product functionality and supporting stable firmware releases and customer deployments.
- Supported debugging, verification, and root-cause analysis of hardware and firmware issues during R&D, product validation, and field testing.
- Contributed to electrical schematics, engineering documentation, and cross-functional product-development efforts supporting 10+ technical product manuals and product platforms.

PROFESSIONAL RESEARCH EXPERIENCE

May 2025 - Aug 2026 **Observational Cosmology Laboratory (Full-Time)** Urbana, IL
Mechanical Engineering Researcher | NASA-Funded TIM Telescope

- Developed a helium boil-off analysis framework for the TIM cryostat to quantify liquid-helium consumption during He-10 refrigerator cycles and baseline cryogenic operation.
- Built a comprehensive He-10 refrigerator cycle catalog by integrating data from multiple sources, documenting cycle start/end times, pump heating and cooldown periods, system behavior, and abnormalities.
- Developed Python-based data-processing and visualization tools to convert raw cryogenic sensor data into helium level, volume, boil-off rate, and cycle-performance metrics.
- Evaluated the effect of refrigerator cycling on the 4 K liquid-helium bath, supporting assessment of cryostat performance and expected cryogenic lifetime.

PROJECT & OUTREACH

2025- Present **TINY CLUES SCIENCE (Part-Time)** Glendale Heights, IL
Founder & Operations Lead

- Manage materials, inventory, purchasing, scheduling, transportation, costs, safety, and event execution for Tiny Clues Science, a STEM outreach business providing hands-on science experiences for children. Develop and improve interactive experiments and educational programs while coordinating customer demand and operational requirements. Generated $5,000+ in revenue within the first six months of operation.