

Nikolai Fuentes

SUMMARY

Recent Mechanical Engineering graduate equipped with hands-on experience in automation and machine design, gained through academic projects and internships. Proficient in creating 3D models and technical documentation while actively collaborating within engineering teams. Driving goal-oriented solutions, focused on enhancing manufacturing processes and introducing innovative automation designs. Eager to apply problem-solving skills to real-world challenges, working alongside experienced engineers. Committed to building effective relationships and contributing positively to team dynamics while advancing knowledge in mechanical systems and operational efficiencies.

EDUCATION

Bachelor's Degree in Mechanical Engineering
University of Illinois GPA: 3.8
Coursework: Thermodynamics, Fluid Mechanics, Dynamics, Manufacturing Processes

2026
Champaign, IL

TECHNICAL SKILLS

- **Design Software:** SolidWorks, AutoCAD, CATIA
- **Manufacturing Techniques:** CNC Machining, Additive Manufacturing, Injection Molding
- **Project Management Tools:** Trello, Asana, Microsoft Project
- **Testing Equipment:** Oscilloscope, Multimeter, Force Gauge
- **Print Communication:** Technical Drawing, Specification Sheets, CAD Models
- **Mechanics Principles:** Statics, Dynamics, Fluid Mechanics
- **Engineering Standards:** ASME, ANSI, ISO 9001
- **Quality Assurance:** Lean Manufacturing, Six Sigma, FMEA
- **Materials Science:** Metals, Polymers, Composites
- **Manufacturing Systems:** Production Planning, Process Optimization, Supply Chain Management

SKILLS

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|------------------|---------------------------|---------------------------|-----------------------|
| • 3D Modeling | • Technical Documentation | • Manufacturing Processes | • Prototyping |
| • Automation | • Problem Solving | • Pneumatic Components | • Welding Techniques |
| • Machine Design | • Team Collaboration | • Electronic Controls | • Robotics |
| • SolidWorks | • Mechanical Systems | • Product Development | • Process Improvement |

EXPERIENCE

Mechanical Engineering Student
University Project

September 2024 - May 2026
Chicago, IL

Engaged in a capstone project aimed at conceptualizing and building an automated sorting system using pneumatic components and electronic controls. Collaborated closely with peers for multidisciplinary problem-solving and innovation. Developed solution-focused strategies with clear documentation and presentation of outcomes to faculty, gaining invaluable feedback.

- Designed an automated sorting system prototype, enhancing material handling efficiency.
- Created and updated detailed 3D models and technical drawings using SolidWorks for precision.
- Collaborated with fellow engineers on real-world automation design challenges.
- Tested and troubleshooted prototypes, refining designs based on trial results and peer input.
- Presented findings effectively, recognized for depth of analysis and clarity.
- Participated in peer reviews, contributing to collaborative improvement and learning.

Mechanical Engineering Intern
Innovative Machine Solutions

June 2025 - August 2025
Chicago, IL

Supported senior engineers in developing tailored automation equipment tailored for diverse manufacturing environments. Gained practical experience in 3D modeling, assembly design, and quality assurance testing. Promoted collaboration across departments to address engineering tasks efficiently.

- Assisted in designing custom automation solutions, enhancing production workflows.
- Contributed to 3D models and comprehensive documentation imperative for production purposes.
- Took an active role in machine builds and quality testing during production phases.
- Evaluated prototypes focusing on cost-efficiency and manufacturability while providing actionable insights.

- Worked effectively with cross-functional teams to bolster project successes.
- Actively provided technical support throughout the troubleshooting process, improving reliability.

LEADERSHIP & AWARDS

- Dean's List, University of Illinois (2025)
- First Place, University Engineering Hackathon (2025)

CERTIFICATIONS

- SolidWorks Certified Associate  2025
- OSHA 10-Hour General Industry Certification  2025

PROFESSIONAL AFFILIATIONS

- Member, Mechanical Engineering Society (2024 – Present)
- Volunteer, STEM Outreach Program (2025)

LANGUAGES

- English (Native)
- Spanish (Proficient)

ADDITIONAL INFORMATION

Work Status : Authorized to work in United States. No sponsorship required.

REFERENCES

AVAILABLE ON REQUEST