

# Camila Solis

camilasolis2002@outlook.com • (817) 503-3573 • Fort Worth, TX 76179 • Evanston, IL 60201

## EDUCATION

**Northwestern University**, Evanston, IL

September 2021 – June 2025 (Anticipated)

**Bachelor of Science in Mechanical Engineering, Design Concentration**

GPA: 3.6/4.0

**Minors/Certificates:** Segal Design Certificate, Latina & Latino Studies Minor

**Relevant Courses:** Human-Centered Product Design, Fluid Mechanics, Thermodynamics, Industrial Design Projects

## WORK EXPERIENCE

**Caterpillar Inc**

Lafayette, IN

*Corporate Engineering Intern- LPSD Lifecycle Management Team*

June 2023 – September 2023

- Designed 2 spark plug adaptors for highly accelerated life test of engine components, integrating design engineers' feedback for fabrication, quote negotiation, and manufacturing methods of the designed components.
- Created a program that categorized 100+ upper and lower-level components for 41 bench-testing assemblies.
- Collected and analyzed 1000+ data points for cost-reduction initiatives of supplier-manufactured parts.
- Completed daily engine inspections of completed C-175 engines, ensuring the engine control module and intake manifold met safety-procedure standards for shipment.

**Segal Design Institute Prototyping and Fabrication Lab**

Evanston, IL

*Shop Trainer*

September 2022 – Present

- Conducted 1-2-hour training modules on basic shop safety and tool use (drill press, vertical bandsaw, hand tools), and more advanced tools (mill and lathe, laser cutters) for students' personal and course projects.
- Assisted students in design projects, providing input on modeling, part sourcing, and manufacturing methods.
- Aided manufacturing course Teaching Assistants and students in machining labs for mill-manufactured parts.

## COURSE PROJECTS

**Injection Molding Project**

Northwestern University

*Course: Computer Integrated Manufacturing II: CAD/CAM*

January 2024 – March 2024

- Designed, modeled, and developed 3 injected-molded parts, creating 1 complete assembly via sketches and NX CAD.
- Implemented design for manufacturability principles to ensure machinability and execution of injected-molded parts.
- Manufactured 2 comprehensive molds (core and cavities) using the CNC for 30+ injection-molded assemblies.

**NU Transit Points (NUTP) for sustainNU**

Northwestern University

*Course: Human-Centered Service Design*

January 2023 – March 2023

- Developed NUTP, a mobile-app service that rewards students for using public transportation on and around campus.
- Created journey maps, frameworks with stakeholder-backed data, storyboards of potential services, testable prototypes, and a final service blueprint considering feasibility, logistics, and user-engagement.
- Incorporated feedback from NU faculty/students and sustainability initiatives to produce an effective service.
- Organized team meetings, delegated tasks, and coproduced a service prototype and final presentation in a team of 4.

## ACTIVITIES/LEADERSHIP

**Society of Hispanic Professional Engineers (SHPE)**

Northwestern University

*Secretary*

March 2023 – March 2024

- Published weekly SHPE NU emails to 100+ members about club events and professional development opportunities.
- Volunteered for high-school outreach programs through weekly Science Bowl tutoring for Evanston Township HS and the High School Initiative Program (HSIP), introducing students to fields of study and potential careers in STEM.

**Ballet Folklórico Mexicano de Northwestern: Ritmo de Mis Ancestros**

Northwestern University

*Head Choreographer*

August 2023 – Present

- Managed a team of 5 choreographers to coordinate and teach dances for 40 performers over 9 months.
- Taught various traditional Mexican folk dance workshops to over 50 students in preparation for the Spring Show and guest performances, totaling 350+ audience members.

## SKILLS

**Software/Programming:** MATLAB, Python, VBA, SolidWorks, Creo, NX, Teamcenter, Figma, KeyShot, Microsoft Office

**Language:** Spanish (fluent), English (fluent. technical)

**Shop:** Laser-Cutter, Vertical Band Saw, Panel Saw, Miter Saw, Woodworking, Mill Conversational, CNC Mill, Lathe