

# Drew Guardiola

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## EDUCATION

### Northwestern University - McCormick School of Engineering

Combined B.S./M.S. in Mechanical Engineering, GPA: 3.75/4.00

Evanston, IL

Expected June 2027

Relevant Coursework: Engineering Analysis I-IV, Design Thinking and Communication, Electronics Design, Mechanics of Materials, Mechatronics, Thermodynamics, Mechanical Design, Fluid Mechanics, Machine Dynamics, Embedded Programming in Python

## TECHNICAL EXPERIENCE

### Honeywell Aerospace Technologies

Systems Engineering Intern

Phoenix, AZ

June 2025 - September 2025

- Verified 200+ engine requirements and enabled team-friendly reporting through 50+ reports in DOORS Report Builder
- Contributed to FEA and CFD simulations for propulsion systems using physics-based analysis and design validation

### 3D-Printed Bicycle Brake Caliper

Mechanical Design

Evanston, IL

Spring Quarter 2025

- Leveraged Siemens NX to utilize topology optimization and FEA for weight and strength analysis to model a brake caliper
- Designed a 3D-printed bicycle brake caliper using load pathing, stress analysis, failure theories, and engineering first principles to meet strength and weight goals, allowing a bicycle traveling at 20 miles per hour to stop within 5 meters

### Northwestern Formula Racing

Aerodynamics Subteam Engineer

Evanston, IL

September 2024 - Present

- Optimized vehicle performance through CFD, FEA, and iterative CAD design, increasing the lift/drag ratio from 1.89 to 2.03
- Optimized geometry of the rear wing endplates and airfoils, ensuring compliance with FSAE competition regulations

### Automatic Card Shuffler

Self-directed Capstone Project

Evanston, IL

Spring Quarter 2024

- Designed and built an autonomous card shuffler by integrating DC motors, microcontroller logic, and mechanical parts such as laser-cut acrylic and CNC routed-wood component for reliable and effective hands-free operation
- Required card deck to be processed only twice before it was thoroughly shuffled, reducing shuffling time by around 20%
- Managed timeline and set goals autonomously, led mentor check-ins, presented functional prototype to peers

### Segal Design Institute

Design, Thinking, and Communication

Evanston, IL

Winter + Spring Quarters 2024

- Collaborated with an external client to clearly define project requirements before pursuing design solutions
- Prototyped and designed baby pants that secured children in high chairs, vastly enhancing child safety and parent security
- Served as chief project manager of a 4-student team, delegating tasks like a research paper, interviewing potential users, user testing, and prototype testing over an 11-week course while ensuring product stability and client satisfaction

## LEADERSHIP EXPERIENCE

### Ascend Consulting Group, Northwestern Chapter

Founding President

Evanston, IL

July 2024 - Present

- Spearheaded the establishment of the ACG Northwestern Chapter by forming a five-member executive board, defining leadership roles, and recruiting thirty members through a rigorous selection process to build a strong foundation
- Led a consulting project with Y-Combinator-backed Capitol AI, managing weekly data collection and user feedback analysis while delivering actionable insights and strategic recommendations to enhance client products and optimize performance
- Worked closely with student leaders at other universities across the country to solidify vision for mission and values

## AWARDS + ACTIVITIES

### Susquehanna International Group Poker Tournament 2024-2025

Chicago, IL + Philadelphia, PA

- Placed 2nd out of 100, winning \$1,000 by applying advanced critical thinking skills competing against 500+ qualifiers
- Placed 5th out of 8,000, winning \$1,500 after qualifying through regionals and outperforming in SIG's national tournament

### Kappa Theta Pi (KTP), Kappa Chapter

Evanston, IL

- **VP of Marketing** - Oversaw marketing strategies and initiatives, increasing chapter visibility and engagement by 200%

### Hispanic Scholarship Fund Scholar

Glen Ridge, NJ

## SKILLS AND INTERESTS

**Engineering/Computer:** Ansys, Siemens NX, SolidWorks, Laser Cutting, 3D Printing, CNC Router, Microsoft Excel, Python

**Interests:** Texas Hold 'em, Tenor Saxophone, Tennis, Biking, Weightlifting, Snowboarding, Photography, Puzzles