

Lilly George

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EDUCATION:

Purdue University John Martinson Honors College: *West Lafayette, IN* **Class of 2028**
B.S Mechanical Engineering, Materials Science and Engineering Minor **GPA 3.4**

EXPERIENCE:

Honda Motor Company – Mechanical Engineering Test Intern, Haw River, NC **May 2026 – August 2026**

- Correlating in-use strain and acceleration data from commercial mower to vertical hydraulic actuator movement for creation of an in-place drive test; calculating damage and decreasing necessary test time
- Modeled (Catia), prototyped, tested, and validated solution to lawnmower blade plate serviceability issue
- Designed bracket connecting voltage generator to blade shaft for more accurate stop time measurement

Cummins – Mechanical Engineering Intern, Columbus, IN **June 2025 – August 2025**

- Followed and supported a fast-paced 60L genset program; determined necessary engine validation tasks
- Researched turbomachinery integration on larger alternative fuel (biodiesel, H₂) engines
- Broke down turbocharger load limit calculations to improve prior practices and push product performance

Moon Area Gymnastics Association – Coach, Moon Township, PA **December 2019 - May 2024**

- Instructed 15-20 young gymnasts with 2-4 coworkers on skill techniques and safety through physically spotting, verbal corrections, and physical demonstrations to improve their gymnastics abilities
- Choreographed and taught a class of 20 gymnasts a 3-minute routine to perform in a showcase

EXTRACURRICULAR ACTIVITIES:

Purdue Formula SAE Electric Racing – Vehicle Dynamics, Purdue University **August 2024 – Present**

- Designed, validated, manufactured, and assembled control arm suspension tabs ('26)
- Planned, executed, and analyzed data from UTM testing of suspension members in uniaxial tension ('26)
- Designed sensor mount and camber plate, manufactured steering clamps, and aided in assembly ('25)

Undergraduate Research Assistant, Purdue Layered Materials and Structures Lab **January 2026 – Present**

- Spring/Summer 2026: Investigated feasibility and properties of rare earth metal doping in Ti₃C₂ MXenes
- Onboarding: Explored prior work on MXenes, in person HF acid training, lab safety, lab equipment use

Mentor – Women in Engineering 1:1 Mentoring Program, Purdue University **August 2025 – Present**

- Monthly meetings with freshman mentee to share advice and ensure success in college

Volunteer - Pittsburgh Vintage Grand Prix, Pittsburgh, PA **June 2015 – June 2024**

- Raised \$300,000/year for charities benefiting those with Autism
- Registered and parked 600+ cars over two days with a team of five volunteers at annual car shows
- Monitored the gate for an invite-only show (300+ cars); redirected 100+ others affected by closed streets

STUNT Team Member, Purdue University **August 2024 – May 2025**

- Part of inaugural team; contributed to first game victory; traveled and attended two tournaments
- Practiced nine hours a week to learn 15 stunting and tumbling routines from August to February

SKILLS, ACHIEVEMENTS, AND INTERESTS:

Skills: Siemens NX, MATLAB, Ansys FEA, Strain Gauges, Python, Autodesk Inventor, Fusion360, Catia V5, C

Achievements: Dean's List/Semester Honors (x2/x3), Alpha Lambda Delta/Phi Eta Sigma Honors Society member, John Martinson Honors College student, Commended by National Merit Scholarship Program (2024)