Max Gorodetzki

Los Angeles, CA | max@gorodetzki.com | LinkedIn

EDUCATION

Purdue University, College of Engineering — **West Lafayette, IN**
Bachelor of Science, Mechanical Engineering — **Fall 2028**
Mathematics Minor — GPA: 3.4/4.0

TECHNICAL SKILLS

- CAD: SolidWorks, NX, AutoDesk Fusion. Manufacturing: 3D Printing, Automotive Service. Programming: Python (10+ years), MATLAB (1+ year). Software: Teamcenter (PDM/PLM).

PROFESSIONAL EXPERIENCE

American Society of Mechanical Engineers — **West Lafayette, IN**
Robotics Team — **Aug 2026 - Present**

- Designed and prototyped a servo-actuated camera mount for a competition rover, enabling remote control of camera orientation and lens positioning during field operations.
- Developed concept sketches and translated designs into detailed CAD models and digital twins in Autodesk Fusion to support iterative design and manufacturing.
- Collaborated with the ASME Robotics Team to develop a rover subsystem for the 2027 Canadian International Rover Challenge, balancing performance, reliability, and integration requirements.
- Utilized 3D printing to prototype testing of the camera mounting system before machining into a final product.

Beta Sigma Psi Fraternity — **West Lafayette, IN**
Secretary — **Apr 2026 - Present**

- Documented and distributed detailed meeting minutes for weekly executive and chapter meetings, supporting communication, accountability, and coordination among 50+ active members.
- Prepared and submitted formal reports summarizing chapter accomplishments, membership activities, and organizational initiatives to the national organization for publication in a biannual newsletter.
- Contributed to executive board decision-making by providing administrative support, maintaining organizational documentation, and participating in strategic discussions regarding chapter operations and goals.

Purdue Baja SAE — **West Lafayette, IN**
CVT Sub-Team — **Sep 2025 – Dec 2025**

- Designed a custom pillow block bearing housing in SolidWorks, optimizing weight, manufacturability, and structural performance through iterative design reviews and engineering analysis.
- Modeled a brake rotor mount and pedal assembly during onboarding to develop proficiency in SolidWorks and mechanical systems, modeled interactions between parts.
- Applied design for manufacturing and tolerance analysis to ensure compatibility between various chassis subsystems through hand calculations.

Hank's Tire — **Los Angeles, CA**
Tire Technician — **May 2025 – Aug 2026**

- Performed tire mounting, balancing, repairs, rotations, and basic vehicle maintenance while maintaining shop cleanliness, adhering to safety standards, and providing reliable customer service in a fast-paced environment.
- Diagnosed tire and wheel issues, operated specialized shop equipment, and collaborated with team members to complete vehicle service efficiently while maintaining high standards of quality and safety.

VATSIM Flight Simulation — **Los Angeles, CA**
Facility Engineer — **May 2022 – Aug 2026**

- Managed technical projects for VATSIM, a global aviation simulation network, including custom software development, server migration, and FOIA-based aviation data acquisition to improve operational accuracy.
- Created custom software tools to automate the conversion and management of aviation data, streamlining the integration of real-world procedures and improving the accuracy of virtual air traffic control operations.

PROJECTS

Taum Sauk Reservoir Analysis — **ENGR 13200**

- Led a small team of 4 to mathematically model the Taum Sauk reservoir using a laminar approach. Utilized regression in data analysis to compute daily energy production.

COMMUNITY INVOLVEMENT/VOLUNTEERISM

Purdue Math Society — **West Lafayette, IN**
General Member — **Sep 2025 - Present**

- Participated in weekly collaborative problem-solving sessions focused on number theory, calculus, algebra, and analysis while preparing for the William Lowell Putnam Mathematical Competition.