Brandon Isaac Goldberg

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EDUCATION

Georgia Institute of Technology **Atlanta, GA**
Bachelor of Science in Mechanical Engineering, GPA: 3.9 / 4.0 Expected: May 2028

TECHNICAL SKILLS

Design and Simulation: SolidWorks, Onshape, Siemens NX, Cadence Reality DC, Revit, AutoCAD, MATLAB
Fabrication: CNC machining, lathe, mill, waterjet, laser cutting, 3D printing, electronics assembly
Methods and automation: Engineering drawings, GD&T, design for manufacturing, prototyping, Python, Dynamo

EXPERIENCE

AHA Consulting Engineers **Alpharetta, GA**
Data Center Design – CFD Intern May 2026 – Aug 2026

- Generated approximately $400k in client revenue by developing and analyzing CFD models for 20+ data center campuses up to 250 MW, including projects for QTS, Meta, and AWS.
- Evaluated cooling, airflow, and recirculation in CFD models with up to 100 million cells to identify equipment risks and inform chiller layouts, generator placement, and cabinet power distribution.
- Streamlined simulation setup by automating Revit pipe-network exports with Python and Dynamo and creating an Excel tool to generate location-specific weather cycles for exterior wind studies.
- Compared mitigation strategies through exterior CFD studies and helped present findings to clients, explaining how proposed design changes would affect data center performance.

Flowers Invention Studio **Atlanta, GA**
Prototyping Instructor Jan 2025 – May 2026

- Trained students to safely operate 3D printers, waterjets, laser cutters, metalworking tools, and electronics equipment.
- Helped students turn CAD designs into functional prototypes by advising on materials and tolerances and troubleshooting fabrication, fit, and assembly problems.

PROJECTS

Autonomous Competition Robot **Atlanta, GA**
Mechanical Design & Prototyping Jan 2026 – May 2026

- Created the complete robot CAD model and assembly in SolidWorks and fabricated the robot with three teammates using wood, aluminum, 3D-printed parts, and mechatronic components within a $120 budget.
- Designed and built the pneumatic launcher, supporting system design decisions with engineering calculations, concept selection tools, and a controls flowchart.
- Helped redesign the launcher and delivery system to improve the robot's score by 180% from an official run-through to the final competition, where the team placed 15th of 71.

EcoCAR EV Challenge VIP **Atlanta, GA**
System Design & Integration Team Member Jan 2026 – May 2026

- Designed a custom touchscreen mount in Siemens NX for a Cadillac LYRIQ center console and fabricated a 3D-printed prototype that was installed in the vehicle.
- Refined the design through iterative vehicle test fits to resolve interference, reduce gaps, and improve mounting alignment and touchscreen positioning.
- Contributed to Georgia Tech's first-place overall EcoCar EV Challenge team, which earned 13 competition awards.

Agile Locomotion & Manipulation VIP **Atlanta, GA**
Undergraduate Researcher Aug 2025 – Dec 2025

- Fabricated five metal components for a robotic arm to specified tolerances using a mill, lathe, and waterjet.
- Refined robotic-arm CAD models in SolidWorks and Onshape and contributed to a gripper redesign that added a degree of freedom through 360-degree rotation.

LEADERSHIP

Cornerstone-to-Capstone Mentoring Program **Atlanta, GA**
Engineering Mentor Aug 2026 – Present

- Mentor two first-year ME 1670 teams through the engineering design process, providing technical guidance on SolidWorks CAD assemblies, design feasibility, and engineering drawings.

American Society of Mechanical Engineers **Atlanta, GA**
Board Member – Special Events Team Aug 2026 – Present

- Support planning and coordination of career fairs, alumni mixers, and company events through cross-committee planning, volunteer coordination, and event scheduling.

Board Member – Finance Team Sep 2025 – May 2026

- Coordinated with club members and a faculty member to arrange reimbursements for chapter purchases.