

Contact (262) 765-1572 acbrion@wisc.edu	AIDEN BRION Mechanical Engineering ♀ UW Madison <a href="#">in</a>	
September 2021 – May 2026	<b><u>Education</u></b> <b>University of Wisconsin-Madison</b> — B.S, Mechanical Engineering (May 2026) <i>Awards: Deans list, National Society of Leadership and Success</i>	
December 2023 – June 2025	<b><u>Projects &amp; Clubs</u></b> <b>President of SAE Aero UW</b> <ul style="list-style-type: none"><li>Led a 40+ student engineering team from <b>concept → CAD/FEA → manufacturing → flight-ready RC aircraft</b> for the <b>international SAE Aero Design Competition</b>.</li><li>Created and managed the program end-to-end: set standards, ran design reviews, and <b>resolved critical system integration</b> (tail-fuselage, wing-fuselage, LG-fuselage, latch sys.) keeping builds on schedule.</li><li>Designed and executed <b>prototype testing &amp; validation</b> (wind-tunnel thrust tests, STAR-CCM+ aero, ANSYS structural checks) to verify lift, CG, and control authority before flight.</li><li>Represented UW–Madison at international competition (Van Nuys, CA); coordinated travel/logistics, sponsor relations, and team readiness.</li><li>Led fundraising to events to secure \$20,000 and 5 sponsors; managed a \$2,000 prototype budget, materials, and machine access to deliver on time.</li></ul> <b>Drone Interceptor – Senior Design Project</b> <ul style="list-style-type: none"><li>Designing an autonomous UAS to intercept hostile drones; <b>ArduPilot</b> for waypoint/nav control.</li><li>Intercept points computed from ground-radar system; GPS guides <b>autonomous</b> flight to coords.</li><li>Designing power system to supply full-throttle current safely and reliably.</li></ul>	
September 2025 – Present	<b><u>Experience</u></b> <b>Aerospace Engineering Internship • Orizon Aerostructures, KS</b> <ul style="list-style-type: none"><li>Authored the plant's <b>Digital Twin</b> roadmap linking ERP, QC, machining, and assembly data to a living model of the line, built to increase throughput ~20% and lessen rework by ~10% with root-cause visibility.</li><li>Designed a <b>SQL→Power BI</b> pipeline (using AI to optimize DAX and visuals) unifying ERP + floor data for real-time constraint calls.</li><li>Diagnosed an <b>ERP data integrity gap</b> (schedule lag) and aligned operators and supervisors to rebuild master-data rules.</li><li>Utilized <b>AI</b> to build a <b>Python</b> stock screening application that uses advanced algorithms to select stocks based on numerous quantitative metrics.</li></ul> <b>Engineering Internship • Grede LLC, WI</b> <ul style="list-style-type: none"><li>Diagnosed FANUC robot ROM/path issues; recommended layout and program tweaks to reduce stalls.</li><li>Built a 3D plant model in <b>AutoCAD</b> integrating machines &amp; material flow to aid planning and workflow.</li><li>Designed a VTL holding fixture that prevents part rotation, improving cut accuracy and repeatability.</li></ul> <b>Mechanical Engineering Internship • Pregis, WI</b> <ul style="list-style-type: none"><li>Fixed film blend variability by characterizing resin densities; stabilized specs for predictable line performance, preventing waste and downtime → \$200K annual savings.</li><li>Developed and executed <b>time studies</b> (roll changes, setup) and recommended changes that cut idle time and improved throughput.</li></ul>	