

# Colin Bionda

McHenry, IL | 815-861-2293 | cbionda58@gmail.com | [www.linkedin.com/in/colinbionda](http://www.linkedin.com/in/colinbionda)

## SKILLS

**CAD:** Autodesk Inventor, AutoCad, Siemens NX

**Analysis:** AutoCad Mechanical, Inventor Stress Environment, ANSYS

**Other:** Highly organized, critical thinker, works well under pressure, strong team collaborator

## WORK AND LEADERSHIP EXPERIENCE

**Design Engineer I** – General Kinematics Corporation, Crystal Lake, IL **June 2023 - Present**

- Develop, analyze, and test proprietary vibratory process equipment to meet customer considerations and requests.
- Create and modify engineering drawings in conformance with company methods.
- Accurately define equipment, assemblies, and parts for manufacture that comply with in-house capabilities.
- Utilize sheet metal techniques to create three dimensional models that ensure accuracy and safety in design.
- Use analysis tools to closely monitor stress and deflection of parts prior to fabrication.
- Test and adjust equipment to optimize performance and vibration characteristics ensuring design specifications are met.

**Design Engineer Intern** – General Kinematics Corporation, Crystal Lake, IL **May 2022 – August 2022**

- Re-designed a fan-cooled motor cover plate for maximum open area to obtain lower operating temperatures.
- Applied engineering knowledge to the design and manufacturing of industrial vibratory equipment.
- Assisted in the assembly/disassembly of machines in the fabrication shop.
- Worked with engineering co-interns to execute projects that increased unit efficiency and lifespan
- Calibrated performance measuring devices for customers' ease of use in the field.

**Manufacturing Engineering Intern** – Rogers Group, Clare, MI **May 2021 – August 2021**

- Verified products were within tolerances as specified by the Research & Development team.
- Operated fabrication, paint, and assembly equipment.
- Captured new data to enhance decision making by redeveloping part number tracking system in MS Excel.
- Developed bolt shipping packs using AutoDesk Inventor

**Office Assistant** – Physics Department, Central Michigan University, Mount Pleasant, MI **November 2021 – May 2023**

- Assisted physics professors in organizing exams, classrooms, syllabi, and office hours.
- Kept records of student information to assure students have a seamless program experience.
- Contacted colleges in the surrounding area to promote various programs the university has to offer.

## PROJECTS AND ACTIVITIES

**Ground-Up Vehicle Rebuild** **October 2024 – February 2025**

- Rebuilt vehicle from bare chassis by disassembling and reassembling powertrain and suspension systems.
- Implemented custom fabrication solutions to improve fitment of upgraded components.
- Used data acquisition software and instrumentation to monitor vehicle behavior.
- Diagnosed and resolved mechanical and software failures using root cause analysis and service manuals.
- Validated vehicle performance through controlled testing and refinement.

**Complete Vehicle Repaint** **September 2025 – November 2025**

- Fully disassembled and prepared body through stripping, sanding, masking, and priming.
- Applied automotive paint and clearcoat while managing cure times and maintaining a clean environment.
- Reassembled all vehicle systems while verifying proper alignment and functionality.
- Replaced worn fasteners and seals and validated safety and performance.

**Member, Baja SAE / Chippewa Performance** **August 2022 – May 2023**

- Collaborated with the team to design and build a fully functioning open wheel Baja style race car.
- Prepared the car and team for Collegiate Design Series competitions, while abiding by SAE International standards.
- Designed driveshaft, assisted in suspension design and assembly, and implemented competitive strategies.

## EDUCATION

**Central Michigan University, Mount Pleasant, MI** **August 2018 – May 2023**

**Major:** Mechanical Engineering

**Minor:** Marketing