Trevor Grey Williams

MECHANICAL DESIGN ENGINEER

Passionate, innovative, and hands-on engineering professional with over 15 years experience concept-to-consumer development of consumer products, laboratory/medical devices, electro-mechanical assemblies, and single-use consumables.

SolidWorks, Pro/E	Manual and CNC Machining	3D Printing Expert	DOE, DAQ, Analysis, FMEA
Complex Surfacing	Plastic Injection Molding	Soft Tooling, Casting	DV/PV Testing, Stage Gate
FEA, CFD, PDM	Sheet Fabrication, Welding	MCUs, Motor Drives	FDA, USP, ISO, cGMP
Motion Simulation	Fine Blanking, Stamping	Electrical Integration	DFM, DFA, Lean
CAM, G-code	Metal Casting, PM, MIM	Membrane Overlays	CSA, CE, UL
Photo Rendering	Wire and Sinker EDM	EMI Suppression	IQ/OQ/PQ
ANSI Y14.5 GD&T	Coatings, Heat Treatments	UX/UI Design	Patents and IP

EXPERIENCE

Remington Outdoor Company (Remington.com) **Huntsville, AL** **(2016-now)**
Senior Design Engineer – Marlin Lever Action Rifles

- Lever action rifle engineering lead for new product development & launch, process improvements, and cost initiatives.
- Prototype construction, DV/PV testing, and support of production ramp-up activities under Remington's NPD process.
- Conceptualization and design of innovative new products for the Marlin brand.

BIOio (BIOio.co) **Logan, UT** **(2015-2016)**
CTO – Start up – Medical Devices – Single Use BioProduction (Pharmaceuticals)

- Development of electro-mechanical systems and polymeric consumables using a lean build/measure/learn strategy.
- Product planning, business canvas, user studies, MVP design, funding pitches, commercial partner collaboration.

Thermo Fisher Scientific (ThermoFisher.com) **Logan, UT** **(2012-2015)**
Design Engineer 3 – Medical Devices – Single Use BioProduction (Pharmaceuticals)

- Research, design, and development of innovative new products and technologies for single-use BioProduction industry.
- Design of injection molded parts and extruded films utilizing gamma stable plastics (FDA / USP class VI / ISO 10993 compliant).
- Rapid concept prototyping, CFD / FEA / heat transfer, process development, component/material qualifications for cGMP use.
- Development/validation/documentation within an ISO 13485 quality system for class III medical devices.

TGWMS LLC (BluDuc.com and FullyAutomaticAirgun.com) **Kennesaw, Ga** **(2007-2012)**
Lead Designer – Various Markets

- Contract-based mechanical/electrical engineering, product design, and IP documentation.
- Design, development, manufacture, and sale of the world's most powerful BB/pellet airgun.

Omni International (Omni-Inc.com) **Kennesaw, Ga** **(2001-2010)**
Senior Mechanical Engineer – Laboratory Devices and Consumables

- Led new product development and launch activities of electro-mechanical laboratory devices and single-use plastic assemblies.
- Directed industrial design and engineering guidelines of all new products driving a company's product image for a decade.
- Managed product validation testing, certification compliance, tooling procurement, and assembly processes.

EDUCATION

Southern Polytechnic State University Marietta, Ga **(1998-2003)**

- Bachelor of Science MET; 3.8GPA magna cum laude
- SAE Super Mileage Vehicle Competition (2002 frame design & build, 2003 lead vehicle design & build)

INTERESTS

- Travel, mountain biking, firearms, camper vans, ATVs, photography, carbon fiber composites
- Fabrication of custom bicycle frames: carbon composite & fillet brazing tube (still riding a steel frame I built 20 years ago)
- Home shop machinist: I own a lathe, mill, 3D printer, and MIG welder and have manufactured countless prototypes.

Project examples available at **TGWMS**.com. References and printable design portfolio available upon request.

TGWMS.com Linkedin.com/in/tgwms T@TGWMS.com 770.815.8012