

Douglas Cecil DuBois

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SUMMARY OF QUALIFICATIONS

Versatile, prolific designer and builder of instruments, vehicles and structures. Highly experienced with metal-working/machining, mold-making, composite fabrication, plastic processes, wood-working and adhesives. Considered a master craftsman by peers and former employers. Consummate experimenter, innovator and problem-solver. Strong computer skills, especially in design/drafting, solid modeling, digital image creation and manipulation, web site design/hosting, and more.

WORK HISTORY

Luthier (Violin Technician/Repairman)

2017-present

- Set up new and old musical instruments to exacting shop standards.
- Repair and restore violins, violas, cellos and bass violins.
- Work with customers to optimize tonal characteristics to their needs and taste.
- Assist with retail sales and rental service.

Senior Engineering Technician

2006-2016

KalScott Engineering, Lawrence KS

- Designed and prototyped a telescoping wing system for a NASA drone research project.
- Designed, built and flight-tested an autonomous drone for a NASA/NOAA atmospheric research payload.
- Designed and built a fleet of 12 computer-controlled electric bicycles for an NIH project.
- Instrumented research aircraft for various missions; assisted with flight testing.

Aircraft Technician

2003-2005

GUT-Works, LLC, Lawrence, KS

- Led the assembly of a carbon fiber racing aircraft powered by a 640 hp V-12 engine.
- Designed and fabricated custom instrument panels; installed autopilots and avionics.
- Repaired, upgraded and re-rigged aerobatic biplanes.
- Dismantled and packaged factory-new Aviat aircraft for overseas shipping.

Senior Engineering Technician

2000-2003

Aerotech Engineering & Research, Lawrence, KS

- Developed and prototyped a sophisticated magnetostrictive linear actuator for the US Navy.
- Designed a retracting, telescoping blade for large wind turbines.
- Developed and prototyped a flushable, water-degradable pregnancy test device.
- Researched and wrote proposals for DOD SBIR projects.

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Systems Engineer

1998-2000

Dreamwings, LLC, Lawrence, KS

- Prototyped a 2-place composite aircraft and assisted in flight tests.
- Evaluated, optimized and prototyped unique new methods of control system activation.
- Designed and optimized proprietary mechanical components for CNC manufacturing.
- Created custom patterns, molds, and composite parts.

Industrial Designer

1992-1998

E and E Display Group, Lawrence, KS

- Designed store fixtures and interactive kiosks of metal, plastic, wood and glass construction.
- Created conceptual drawings and artistic renderings of proposed projects.
- Produced production drawings, specification sheets and wiring diagrams.
- Designed molds and dies for vacuum-forming, injection molding and punch-press operations.
- Produced brochures, assembly instructions and user manuals for various products.

Tool and Die Machinist

1987-1992

Tolorex Grinding and Machining, Lawrence, KS

- Fabricated custom tools, molds, dies and prototypes for major industrial companies.
- Programmed, set up and operated a 3-axis vertical machining center and a wire EDM.
- Operated and maintained lathes, mills, grinders, welders, heat-treating ovens and precision measuring instruments.

Engineer/Technician

1977-1984

The Reuter Organ Company, Lawrence, KS

- Designed and drafted pipe organ structures and electro-mechanical components.
- Fabricated special components for non-standard instruments.
- Produced artistic renderings of proposed projects for the sales department.
- Installed, tuned and serviced pipe organs.

FORMAL EDUCATION

High School Diploma, 1977

Mountain Brook High School, Birmingham AL

PRACTICAL EDUCATION

42 years direct experience in a wide range of diverse shops and disciplines, including 4 positions that required a college degree... plus copious personal projects and study.

SUPPLEMENTAL MATERIALS

Please view my photo portfolio of selected works at: www.brushyrun.farm/portfolio