

John Magolske

Mechanical Design / R&D / Manufacturing

PO Box 460626 San Francisco CA 94146 | trimtab@b79.net
b79.net/cv.html :: b79.net/cv.pdf :: b79.net/cv.txt

Analytical and creative, experienced in the design, prototyping and fabrication of scientific equipment, medical devices, consumer products and museum exhibitry. Excellent written and verbal communication skills, able to continuously learn and apply new knowledge.

AccessClosure, Mechanical Design 12/08 - present

Design of tooling & fixturing for manufacturing cardiac catheter devices. Development of new tooling and improvement of existing tooling for UV bond, vacuum chamber, forming, assembly and inspection processes. Modeled in SolidWorks.

Consulting 11/07 - 11/08

Contract design, consulting, fabrication. Software testing (analyze, validate and troubleshoot VOIP systems). Webmaster for the SF chapter of Engineers Without Borders.

Onda, Product Engineer 5/05 - 10/07

Designed ultrasound test and measurement equipment. Developed new products and improved existing products, from conceptualization to CAD solid models (SolidWorks), to detail drawings. Addressed issues such as form, function, fit & finish, cost, and manufacturability. Also responsible for tooling design, creation & maintenance of documentation, master parts lists and BOM's. Interfaced with outside fabricators and vendors to ensure timely, quality, cost-effective materials.

Contract Design & Fabrication 1/03 - 5/05

Developed educational experiences, including design & fabrication of exhibitry for the Our Place in The Universe exhibit at the Chabot Space & Science Center. Studied Linux/Unix Open Source software. Tutored elementary school children in Language Arts. Wrote an astronomical reference book.

Exploratorium, Exhibit Developer 6/99 - 1/03

Designed and built interactive biology exhibits for the Traits of Life collection. Responsibilities included researching phenomena, cultivation of organisms, conceptualization, CAD design, fabrication, documentation, troubleshooting assembly, installation and maintenance. Display and protect living organisms within electro-optical-mechanical systems, create low maintenance life support systems. Coordinated the work of volunteers, contractors and outside shops. Lead developer for exhibits displaying animal/plant interdependence, CO2 uptake in photosynthesizing grass, CO2 content in a person's exhaled breath, photosynthetic production of O2 in aquatic plants, a termite colony in cross-section and life support / display pods for various strains of mutant *Drosophila*.

BiLobal Design, Owner 1/97 - 6/99

Ran a business developing, manufacturing and marketing an eco-friendly home furnishing product. Coordinated design, manufacture, marketing, and distribution.

MOTO Development Group, Mechanical Design Engineer 12/94 - 12/96

Consulting firm environment. Developed concepts from sketch to 3D CAD models (Pro-E) to first article run and manufacture. Conducted client liaison and project management. Designed injection-molded, sheet metal, and machined parts & assemblies. Projects: Vehicle mount system for ruggedized computer. Automated pool & spa control box. Medication Dispensing Cabinet — designed a system of interlocking modular plastic dividers, sheet-metal parts and light pipes that fit within an existing automated hospital inventory control system. Phone Router — designed plastic injection molded snap-together assembly integrating printed circuit board, connectors & LED indicators. Thermal studies and heat-sink design for Apple Powerbooks.

Wyatt Technology, Mechanical Design Engineer 2/93 - 1/94

Resolved optical, thermal and mechanical design challenges in the manufacture of laser light-scattering scientific equipment used for macromolecular and particle characterization. Improved performance, usability and lowered cost. Responsible for assembly & testing of prototypes and coordination of production with vendors. Designed optical read head and Laser Flow Cell system, patent # 5,404,217 issued.

Vistek/MDI, Manufacturing Engineer 4/90 - 1/93

Responsible for the mechanical design and manufacture of surgical video cameras and Xenon light sources used in orthoscopic surgical procedures. Integration of electronic & optical assemblies. Conducted product and tooling design, process improvement and cost reduction. Implemented GMP procedures, brought document control system up to FDA standards. Re-packaged a CCD video camera into a hand-held camera.

Cal Poly SLO, B.S. Manufacturing Engineering Technology 3/86 - 3/90

Studied Manufacturing Engineering and Processes, emphasis on a Learn by Doing approach. Deans List.

Don Bosco Technical Institute, A.S. Manufacturing 9/79 - 9/84

Hands-on vocational training program. Experience: drafting, lathe, milling machine, precision grinders, CNC equipment, plastic injection molding.

Tools

SolidWorks, Pro-E, AutoCAD, GD&T, MS-Win/Office/Excel, OS X, Linux, Unix shell, Vim, regex, Git, HTML & CSS, vertical mill, lathe, multimeter, soldering iron, microscope, pipette, and a variety of power tools, hand tools and precision measuring instruments.

Ongoing Studies

Power efficient computing, open source software, language, typography, bookbinding, astronomy, amateur radio, sustainable living solutions, furniture design, modular architecture, music