## **ROBERT S. FLIGHT, P.E.**

71 Eagle Rock Drive Rochester, NY 14609 585-666-0172 rsflight@pas.rochester.edu

**EDUCATION** Clarkson University, B.S., Mechanical Engineering

**TECHNICAL** In depth experience in mechanical design, development and analysis of machine elements and components from concept to completion. Guides and mentors students performing research at all levels. Designs new research equipment. Maintains existing equipment. Creates prototypes for demonstrations and proposals. Works closely with professors, staff, UR facilities personnel to complete tasks.

Fluent in the use, organization, and customization of SolidWorks, NX, MasterCAM, and AutoCAD softwares. Broad use of Microsoft Word, Excel, Access, PowerPoint, Office, and Project.

**CERTIFICATIONS** Professional Engineering License **& PATENTS** Patents granted: 4,654,928, 4,672,713, and 4,689,850.

## EXPERIENCE

## 10/04 to 2/15 SENIOR LABORATORY ENGINEER-

University of Rochester, Physics & Astronomy Department University of Rochester, Laboratory for Laser Energetics

Primarily responsible for the design, development, and integration of specialized equipment to meet specific research project and facility operations goals for research funded by DOE that were assembled and installed at various laboratories worldwide. Continual support for Medical Center Ultrasound research equipment and soft tissue research. Performed analysis of mechanical components. Continually assisting professors, students, and technicians, at many universities, to maintain schedules of different project phases and budgets to be within targets. Responsible for accurate job estimating, scheduling, and tracking from project start to project completion. Guides and mentors students performing research at all levels. Supports laboratory classes and equipment. All facets of design and FEA analysis is 3D, SolidWorks, AutoCAD, and Siemens NX based. All project presentations and progress tracking involve extensive use of Microsoft Word, Excel, Access, PowerPoint, and Project.

2/88 to 10/04 **SENIOR ENGINEER**- Creative Designs of Rochester, Inc., Designers and builders of custom machines and equipment.

Developed concepts, completed designs, and created details drawings of custom equipment, sheet metal components, injection molds, tooling, jigs, fixtures, product design, and analysis of mechanical components from concept through manufacture. Responsible for accurate job estimating, scheduling, and tracking from project start to project completion. Continually assist customers in overseeing all aspects of the build phases of industrial projects to maintain schedules and budgets within targets. Supervised team efforts with Mechanical and Electrical designers and build leaders involving design concept, design specific details, build sequence, and debug of custom equipment. Created custom software creation in C, BASIC, and LISP to automate computer tasks, control automated machines, and automate data acquisition needs. All facets of design is 2D & 3D CAD based utilizing AutoCAD, SolidWorks, MasterCAM, Anvil, and Intergraph softwares. All job presentations and tracking phases involve extensive use of Microsoft Word, Excel, Access, PowerPoint, and Project.