

EXPERIENCE

SINCE 4/2008

BRAINLAB BOSTON, MA USA**PROJECT ENGINEER CUSTOMIZATION ENGINEERING**

- Planning and configuration of fully integrated operating rooms.
- Project management.
- Third party coordination of MRI/CT providers, AV consultants and electrical contractors.
- Programming of video and network routers.
- Electrical layout design using CIM E3 software.
- Sales assistance.
- R&D participation.
- Internal and external training for hospital and Brainlab personnel.

1/2007 - 03/2008

BRAINLAB BOSTON, MA USA**INSTALLATION AND SUPPORT SPECIALIST**

- Installation and Service of complete OR solutions (BrainSUITE).
- Setup of IGS (image guided surgery) and AV (Audio/Video) components.
- Integration of hospital PACS system and network as well as third party components.
- Electrical safety testing according to IEC 60601-1-1.

3/2003 - 12/2006

BRAINLAB HEIMSTETTEN, GERMANY**HARDWARE ENGINEER**

- Design of Image Guided Surgery (IGS) enabled surgical instruments.
- Projects included: Development of an IGS ACL drill-guide; quick release adapter for various IGS instruments; Inserter for artificial spinal discs; IGS enabled cup/stem inserter (hip).
- PTC Pro/ENGINEER 2001 & Wildfire CAD software.
- Established concept and introduced company-wide PDM solution (PTC Windchill) for R&D departments.

6/2001 - 10/2002

DESIGN MENTOR PELHAM, NH USA**MECHANICAL DESIGN ENGINEER**

- Design of sterile fluid management devices.
- Main project: Development of a fully automated pathogen inactivation device for Red Blood Cells.
- PTC Pro/ENGINEER 2001 CAD software.

EXPERIENCE

10/1998 - 5/2001

DATUM 3D NEWTON, MA USA**MECHANICAL DESIGN ENGINEER**

- Design of various consumer products using Euclid 3, AutoCAD 2000 and SolidWorks 2000 CAD applications.
- Design of graphics for decals and keypads as well as marketing material.
- Manufactured various prototypes using 3 axis CNC milling machines (Bridgeport and Fadal).
- Designed and manufactured pneumatically actuated garment power drill.
- Designed and built 6-axis motor driven robotic arm to be used for scaled up replication of art models.
- Fabrication of a 4-foot diameter casting model of the Earth and the Moon, using satellite obtained topographical data. The final bronze castings are exhibited in the '[Gottesmann Hall of Planet Earth](#)' of the Museum of Natural History in New York City.
- Project management, including supplier coordination.
- Developed company [webpage](#).

9/1997 - 2/1998

ORTHOPAEDIC RESEARCH INSTITUTE WICHITA, KS USA**RESEARCH ENGINEER**

- Main project: Investigation of factors that result in misalignment during total knee replacement surgery.
- Developed a three-dimensional computer model of the human knee based on geometry obtained from computer tomography images.
- Analyzed structural engineering problems using the Finite Element Analysis method with ANSYS.
- Designed several fixtures for experimental data acquisition using SolidEdge 3D CAD software.
- Validation of the investigated results through in vivo measurements.

4/1996 - 10/1996

SIEMENS MEDICAL DANVERS, MA USA**MECHANICAL DESIGN ENGINEER**

- Designed Enclosures for various medical appliances including EKG monitors and peripheral devices using CADKEY software.
- Performed structural testing and coordinated vendors and the purchase of related equipment.
- Created process documentation according to ISO 9001 standards.

2/1991 - 8/1992

GERMAN RED CROSS NEUSTADT/HASSLOCH, GERMANY**PARAMEDIC**

- Alternating service on first response units and ambulances.
- Taught disaster prevention courses and first aid to the public and group leaders.

EDUCATION

9/1993 - 7/1998 **FACHHOCHSCHULE (POLYTECHNIC UNIVERSITY)** ULM, GERMANY

DIPLOMINGENIEUR (FH)

- Graduated with Medizintechnik degree.
- Equivalent to a Bachelor of Science degree in Precision Instrument Technology with specialization in Medical Technology.

9/1992 - 7/1993 **FACHOBERSCHULE** EDENKOBEN, GERMANY

FACHOBERSCHULABSCHLUSS

- Graduated with Fachhochschulreife degree.
- Equivalent to a Polytechnic University Maturity certificate.

9/1987 - 1/1991 **BASF CORPORATION** LUDWIGSHAFEN, GERMANY

PRECISION TOOLMAKER

- Precision Toolmaker training (equivalent to a US vocational high school diploma in precision instruments)
- Extensive training in machining (milling, turning, grinding) as well as basic mechanical work methods.
- Co-developed and fabricated multiple prototypes.
- Graduated with honors.

INTERESTS

- Rock climbing
- Restoration of classic cars
- Travelling

ADDITIONAL RESOURCES

- [Online portfolio](#) with previous projects.
- [LinkedIn](#) online profile.
- My [Mustang](#) restoration webpage.