DAVID A SEBOK, Ph.D.

5115 Brandywine Drive (610) 539-3571 vm/fax: (530) 348-7935 Eagleville, PA 19403-1159 dsebok@netzero.net www.dsebok.homestead.com

PROFILE:

A Medical Engineer with extensive experience in directing projects that apply technology to create cost effective solutions for the medical community to improve patient care. Areas of expertise include identifying and managing new product opportunities, driving the design and development of medical devices, establishing clinical research goals, building collaborations and bringing products to market. Demonstrated ability in identifying market issues, interfacing with clinical customers/physicians, practical application of technology, managing budgets and directing high performance teams to achieve organizational goals. An effective leader recognized as a visionary capable of bringing disparate groups together.

SELECTED ACCOMPLISHMENTS:

- Increased potential revenue, approximately \$25M, by creating a process to qualify and implement new product ideas. •
- Created the highly acclaimed Voxel Q User Interface, a major component of the commercial success of this medical imaging workstation that generated \$200M in company revenue.
- Consulted with internal teams as Product Expert enabling development of targeted marketing and training tools.
- Increased market share by designing and implementing a collaborative product development process involving teams • of physicians, internal engineering, manufacturing and marketing experts from idea initiation through prototype to final product release.
- Directed the design, development and launch of more than 15 new diagnostic and treatment planning products and • new product features over a 5-year period representing a \$5M increase in company revenue.
- Simultaneously managed 2 teams, one of Ph.D. scientists focused on establishing new product markets, the other a group of software engineers focused on developing products.
- Developed algorithms allowing four times faster 3D and Maximum Intensity Projection reformatting.
- Reduced Magnetic Resonance Imaging (MRI) noise sensitivity in commercial product by developing new algorithms. •
- Enhanced capabilities of medical imaging systems by initiating and conducting independent research on MIP interpolation, client/server based medical imaging, MRI flow characterization, MRI coil design, and MRI phase dispersion.
- Initiated educational project to enhance utilization of computer technologies by designing and building a computer and • associated software used to write Ph.D. thesis.
- Advised president of new medical device company on clinical and design issues of new product that provides physicians with a tool, which assures proper placement of pediatric endotrachial tubes.

EMPLOYMENT HISTORY:

PHILIPS MEDICAL SYSTEMS, Philadelphia, PA

Physicist

Responsible for interacting with premier clinical customers to develop new techniques for PET imaging. Solved complex PET imaging problems. Created top level product development documents. Developed new product software.

MEDAPPS COMPANY, Eagleville, PA

Clinical Director and Acting CEO

Created business plan, solicited funding, and developed overall software architecture for this four person startup company dedicated to creating physician operated image analysis solutions for cardiologists and other referring physicians.

MARCONI MEDICAL SYSTEMS (formerly Picker International), Wayne, PA

Program Manager, Clinical Solutions (1999-2000)

Responsible for determining and initiating new clinical product research and development projects, developing and overseeing budgets, managing interactions of multiple groups and formally reporting progress to senior management. Manager, Clinical Solutions Team (1997-1999)

Led a team of Ph.D. level people responsible for exploring new product market opportunities that included responsibility

2001-PRESENT

2000-2001

1993-2000

for determining technical direction and budget management.

Project Manager, Monet Project (1998-1999)

Managed development project to create next generation medical workstation. Evaluated and selected appropriate technologies and guided individuals to implement.

Project Manager, VoxelQ 3.4 (1997-1998)

Managed software enhancement release for medical workstation that significantly improved functionality.

Manager, Advanced Clinical Software Development (1993-1997)

Directed group of scientists and software developers responsible for delivering new medical imaging products to market.

DYNAMIC DIGITAL DISPLAYS, Wayne, PA

Manager, Advanced Algorithms and Clinical Developments

Responsible for market positioning of new medical workstation by managing user interface, new algorithm, and new clinical application development.

ROBERT WOOD JOHNSON SCHOOL OF MEDICINE, New Brunswick, NJ

Assistant Professor Radiology

Research position with responsibilities including student direction, integration of MRI into pharmaceutical research, and development of new MR Imaging capabilities.

TECHNICARE CORPORATION, Solon, OH

Senior Scientist in MRI Advanced Development

Responsible for research and development to increase the clinical utility of MRI including vascular and cardiac applications. Clinical Liaison with Cleveland Clinic Hospital.

MASSACHUSETTS GENERAL HOSPITAL - Research Fellow in Anesthesia

EDUCATION:

Ph.D., Medical Engineering, Massachusetts Institute of Technology / Harvard University, 1984

A unique program encompassing 70% of M.D. pre-clinical courses including Anatomy, Pathology, and Cardiovascular Pathophysiology plus a clinical year (equivalent to M.D. third year).

Thesis: "An Integrated Model of Lung Water Dynamics" completed at Massachusetts General Hospital.

M.S., Bioengineering, University of Michigan, 1977

B.S., Chemical Engineering, University of Akron, 1976

AWARDS AND SOCIETIES:

Tau Beta Pi, Sigma Tau, Sigma Xi, Whitaker Health Sciences Fellow, A.I.Ch.E Scholastic Award, Akron Rubber Group Scholarship, I.E.E.E. SMRM. RSNA

PATENT, PAPERS AND SELECTED ABSTRACTS:

- Patent 4910460: Method and Apparatus for Mapping Eddy Currents in Magnetic Resonance Imaging, 1989
- Interleaved Magnetic Resonance and Ultrasound by Electronic Synchronization, D. Sebok, et.al., 1990.
- In-Vitro Assessment of the Behavior of Magnetic Resonance Angiography in the Presence of Constrictions, N.Sebok, D.Sebok, D.Wilkerson, R.Mezrich, M.Zatina, 1993.
- Variations in MR Signal Intensity across Normal Human Knee Cartilage, P.Paul, M.Jazsani, D. Sebok, et.al., 1993.
- The Comparative Evaluation of Three-Dimensional Magnetic Resonance for Carotid Artery Disease, D.Wilkerson, D.Sebok, et.al., 1991.
- Image processing on Macintosh II: A Practical Boundary Finding Algorithm for Biomedical Measurement, J.Wang, R.Mezrich, D.Sebok, 1988.
- Use of MRI to Assess Pulmonary Hypertension in Hypoxic Rats, N.Maxwell, D.Sebok, 1988.
- Chemical Shift Imaging by Method of Stimulated Echoes, H.Yeung, D.Kormos, D.Sebok, 1988.
- A Practical Flow Selective RF Pulse Complex, D. Sebok, 1987.
- Role of Phase Dispersion in MR Flow Imaging, D. Sebok, R. Mezrich, 1987.

SEBOK

1990-1993

1987-1990

1984-1986

1981-1983