

Brian McMillin - Design Consultant

Since 1977 Mr. McMillin has been a self-employed consultant to a variety of high-tech industries including oil and gas, aerospace, and telecommunications. He is a Dallas, Texas native and comes from a family where he learned electrical engineering from an early age. He is a member of numerous professional and technical organizations. Over the last forty years, Mr. McMillin has been involved with many tightly-focused software and hardware product development projects.

Professional Experience

2017 - b2DataStream

- Developed CentOS applications for secure manipulation of image data for the banking industry

2002 - Present - BKMcM.com

- Developed gate-level interactive logic simulator for logic system design and documentation
- Developed networking simulator for message-passing design of supercomputer interconnects
- Developed iDB Associative Database and its Quick Query Language as an alternative to SQL databases for collaborative mobile Apps.
- Developed CADscript pure web-based Computer Aided Design and CNC machine control software.
- Developed iPhone / iPad Apps and webApps using HTML5, CSS, JavaScript
- Designed and implemented remote firmware update technologies for use with Microchip PIC controllers.
- Designed and implemented data communication protocols for remote equipment monitors using cellular SMS, cellular GSM / GPRS / EDGE and Iridium Satellite SBD transports.
- Designed and implemented PICdev high-level assembler tools for Microchip microcontrollers.
- Designed and implemented “under the glass” automated meter reading hardware and firmware for the electric utility industry.
- Formed i2Probe company to design and manufacture electric meter reset probes used by electric utility field personnel.
- Developed the Data Universe technique for secure peer-to-peer data storage and resource sharing.

1996 - 2002 - AFX Technology Group International, Inc. VP and Chief Technology Officer

- Filed for multiple U.S. and international patents relating to wireless ad-hoc (mesh) networking.
- Designed and Implemented MinionNet™ software and hardware for Alpha and Beta Test units.
- Designed and Implemented Network Performance Modeling software for mobile short-range communications.
- Designed and Implemented AFX data collection back-end processing and presentation systems.

1977-1996 - Digi-Tech Consultants

- Designed, implemented and maintained high speed real-time data acquisition and communications hardware and software for oil field instrumentation for Mobil Oil.
- Developed purchasing, inventory, and manufacturing database system for Electrospace Systems, Inc.
- Developed chip level memory diagnostic for Action Communication Systems, division of Honeywell.

- Developed line noise measurement firmware using digital signal processors for the Roadrunner switch for Action Communication Systems, division of Honeywell.
- Designed and implemented hardware, firmware and software for disk and tape drives for Convergent Technologies workstations for the Corporation for Distributed Systems.
- Designed and implemented graphical hardcopy drivers for various printers for Medical Graphics Corporation.
- Designed and implemented firmware for a Smart-Card based security access control system for Microcard Technologies, Inc.
- Designed Smart-Card based computer security devices for GuardCard International, Inc.
- Developed commercially published mass market astronomy software for IBM PCs.
- Designed and implemented remote Internet access software including network modem sharing and terminal emulation for InfoSurfer Technologies.

Patents

Node-to node messaging transceiver network with dynamic routing and configuring

United States Patent 7653394

Issued January 26, 2010

On/off keying node-to-node messaging transceiver network with dynamic routing and configuring

United States Patent 7027773

Issued April 11, 2006

Wireless Transceiver Network Employing Node-to-Node Data Messaging

Europe Patent Application PCT/US2000/014356

Filed December 7, 2000

Wireless Transceiver Network Employing Node-to-Node Data Messaging

Japan Patent JP2003508939

Issued March 4, 2003

Education

Georgia Institute of Technology

University of Texas at Arlington

Interests

Amateur Radio
Chemistry
Gardening
SCUBA Diving

Astronomy
Computers
Medicine

Camping
Electronics
Photography

Caving
Flying
Rocketry

Professional Affiliations / Memberships

Association for Computing Machinery
Institute of Navigation
Dallas Area Rocket Society
Texas Astronomical Society
Texas Speleological Association
Microsoft Developers' Network

Institute of Electrical and Electronics Engineers
American Radio Relay League
National Association of Rocketry
Astronomical League
National Speleological Society
Professional Association of Dive Instructors