

The Professional Profile of
BILL MORGAN

Thirty+ years of experience in hardware and software systems engineering.

95% of my jobs are with previous customers

EXPERIENCE HIGHLIGHTS

- Engineering bring-up of new hardware
- Test requirement discovery
- SOC Silicon Verification using Verilog
- Microprocessor verification
- Network Storage System Diagnostics
- Embedded Systems bring-up (SOC)
- Embedded Linux development
- Gnu tool chain support
- Unix Device drivers
- Test Engineering
- Manufacturing Software Development
- New product development
- Operating development
- Operating system porting and tuning
- Sustaining Engineering
- Object Oriented Designs and Implementations
- Principle engineer on Unix C2 enhancement
- MS-Windows, OS/2 PM, and X-Windows product development
- Project management

Development Specialties

Languages

C, C++ (GNU & others), SQL, Python, Java, VC++, VB, Access Basic, REXX, Assembler, Smalltalk, Yacc, Lex, SGML, HTML, XML, Verilog, VHDL, SystemC

Hardware

IBM PC: 80286, 80386, 80486, 80586 (single and dual processor), Mips, Arm, Sparc, Mainframes: 370 to 580, Motorola 68K, Vax, NS32032, NSC 2900

Operating Systems

Linux, Solaris, Xenix, VMS, VM/370, MVS, MS-DOS, OS/2, CP/M and several diagnostic specific operating systems

Windowing Systems

X Windows, OS/2 PM, Java AWT, MS-Windows,

Case Tools

VSDesigner, VSObject Maker, VSReporter, ObjectCraft

Databases

Oracle, MySQL, Postgres, Microsoft Access

Project Experience

Operating System Porting, Support, and Tuning

Embedded Linux development, UP and MP projects.

Linux

Red Hat since 5.1 Multi-threaded application development using pthreads. Motif application development and maintenance.

Genix 4.2 on NS32032

Lead Engineer on project. Responsible for all phases including compilers, drivers, and utilities. Project completed on schedule.

Unix...

Solaris, SCO, Xenix, 4.2 Unix, and SYS V Unix performance tuning. Several projects involving getting the best performance from diverse hardware platforms. Secure Unix (C2) projects. Device drivers and kernel internals, system utilities. Several projects included responsibility for all software running on the system. Testing POSIX compliance for manufacturer of general purpose Unix system.

MVS

Performance monitors. Work included gathering and reporting of system per-

formance statistics. IBM Mainframe: MVS, CMS, VS1, DOS, Stand-alone systems.

Operating system experience covers mainframes to micros. Stand-alone systems were hardware diagnostic systems.

SCSI Disk and tape device drivers for Unix and Xenix. First versions of device drivers for several popular SCSI host adapters. Worked directly with adapter designers.

Multiprocessor system

Development, production, and customer support for dual processor system featuring split kernel. 80586 SMP experience. Disk subsystem emulations.

Test Engineering and Manufacturing Engineering

- Hardware diagnostics using random instruction streams.
- Hardware diagnostics using simulation.
- Silicon verification of SOC using Verilog.
- Engineering bring-up tests for Wireless chip set.
- Engineering Bring-up diagnostics for Win CE chip set. ATE development for manufacturing.
- OS/2 device drivers for tape and disk subsystems.
- Manufacturing line diagnostics for disk products. PCB ATE development. PCB functional tests, setup utilities, and system exercisers for local and overseas facilities. SCSI, ESDI, IDE drives.
- Manager for PCB test development team. Three member team supported manufacturing and field service.
- Manager for Field Service diagnostic team. Depot level diagnostics for field returns.
- Mainframe hardware diagnostics. Stand-alone diagnostic systems from hardcore to feature diagnostics. I/O a specialty.
- Developed diagnostics for XA features for Amdahl computers.
- Novell based manufacturing test systems. Manufacturing line test system for disk products.
- JTAG boundary scan. Large multiprocessor system based on SPARC. Over 900,000 scan points. Worked on system initialization, error analysis and recovery.

- Servo writer software development and maintenance working on yield improvements and data collection.

Client List

2004 - 2005 Conexant
2004 - 2004 Modular Industrial Solutions Inc
2003 - 2003 Sun Microsystems
2002 - 2004 Platform Solutions Inc.
2002 - 2002 Woodside Networks
2001 - 2002 LSI
2001 - 2001 Toshiba America (Artile Microsystems)
2000 - 2000 Hal Computers
2000 - 2000 Amplus Inc.
1999 - 2000 Philips
1999 - 1999 Hal Computers
1998 - 1999 Vadem Corp.
1995 - 1998 Commercial Data Servers
1994 - 1995 Quantum Corp.
1994 - 1994 AuraVision Inc.
1993 - 1994 Advanced System Products, Inc.
1993 - 1993 Amdahl Corporation
1988 - 1993 Maxtor Corporation
1992 - 1992 Cumulus Technology Corp.
1992 - 1992 Adaptec Inc.
1988 - 1992 Andor Computer
1991 - 1991 Syzygy Corporation
1991 - 1991 Parc Place Systems
1988 - 1990 Amdahl Corporation
1988 - 1989 Plexus Computers
1988 - 1988 Tiara Systems
1988 - 1989 Data Technology Corporation
1988 - 1990 Adaptec Inc.
1987 - 1988 ITT
1987 - 1988 Fairchild
1985 - 1987 Molecular Computer