

## **Resume for Mark Blomenkamp**

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### ***Functional summary***

With 25 years experience in Hardware & Software Engineering, I have developed a wide variety of projects including; Commercial web sites, service web sites, telephony, robotics, communications, data processing, digital signal processing, graphics, and image/voice compression & recognition. These projects covered the range from single task embedded processing to real time, distributed multi-tasking and multi-user projects.

I have expertise in the following areas:

- Operating system internals, and real time behavior.
- Windows, VxWorks, VRTX, PSOS, UNIX, MSDOS, AMOS and FLEX operating systems
- C/C++, Perl, Java, JavaScript, and SQL, as well as various assembly languages.
- XML, HTML, DHTML, ASP, VXML
- database design,
- memory/resource management,
- scheduling process control,
- hardware virtualization
- device drivers and BIOS
- PPC, 8260, 68360, 680XX, 80X86, Pentium, 8051, 680X, 6502, and 56002 processors.
- 12+ years of C/C++,
- 12+ years of real time development,
- 4+ years experience designing web-based applications,
- 6+ years designing and implementing GUIs,
- 6+ years experience leading engineering development teams
- I have taking multiple products from conception to market, including design, development, testing and deployment.

Over the years I have worked as the sole designer on some projects designing both the hardware and the software. On others I have worked as a member of a design team, as the team/project lead, as the system architect, and as the Software / Firmware Manager.

## ***Employment***

### **MB CONSULTING 1990 – Present - Santa Clara, CA**

With my own consulting company I have worked on a variety of projects. My company provided systems design, 'C++', 'C' and assembly programming for VxWorks, UNIX, and MSDOS/WINDOWS based systems. For larger projects I provided Management for a team of Software/Firmware consultants. .

Some of my more recent projects have been

- Commercial webs sites ([www.taxprofits.com](http://www.taxprofits.com))
- Informational web sites ([www.umcd.org](http://www.umcd.org) [www.hapharper.com](http://www.hapharper.com) )
- DSP based laser control subsystem for a laser light show company
- Software system architecture to support Redundancy in a voice over ATM concentrator switch.
- Real-time image manipulation applications for laser control
- Database migration and conversion utilities for UNIX based servers
- DSP using the Motorola 56002 and 56301.

### **FORE 1996 – 1999 – San Jose, CA**

As a project lead at FORE, I was responsible for:

- a team of four engineers
- The platform development for the Mithra project, a low cost 10/100 Ethernet switch
- The development of firmware/software for the CAT4000 a tdm T1 to ATM over DS3 concentrator, designed for the central office environment, with full hot stand by redundancy.

### **RAYNET 1992 - 12/95 - Menlo Park, CA**

As a senior software engineer at Raynet, I was responsible for:

- Firmware for Raynet's POTS,VSPOTS,SS1,T1 & 2B1Q line cards. The projects were all real-time embedded controllers.

### **Zentec 5/89-9/89**

At Zentec I worked on:

- Hardware redesign of a 386SX based diskless workstation.
- Manufacturing diagnostic programs for the 386SX workstation.

### **Kruzer Software Corp. 4/88-4/89**

As an engineering consultant For KSC I designed the

- online search package to be added to a CDROM search program, to provide a seamless switch from searching local CDROM based data bases, to searching online data bases.

## **NORAND INC / DMC GROUP 5/86-4/88**

For NORAND I designed:

- PC based real time, voice response multi-channel terminal emulator / concentrator for credit card authorization (AUTO OPERATOR)
- Created a custom voice task language (VTL)
- a voice task development system.
- SOFT TERMINAL BIOS and TTATL assembler.

## **SENSORY INC. 9/84-1/86**

At SENSORY I designed the hardware and software for:

- Telephone interface and control card for an office automation workstation
- PC telephone / voice interface card.

## **ATARITEL 11/82-9/84**

- Senior Micro programmer for a home telephone system (home PBX)
- Software Manager.

## **Fairchild Camera and Instrument 6/78-11/82**

- Three years as a design engineer developing hardware and software for microprocessor based in-house test equipment and assembly automation

## **Ames Research 6/77-6/78**

- I worked with the computational research group developing programs for the SOLARS PROJECT.

**References available upon request.**