

Resume: **JULIAN H. STACEY BSc.Hons.** (Computers & Cybernetics)  
**COMPUTER CONSULTANT: UNIX, NET & SYSTEMS ENGINEERING**  
*( Lebenslauf auch in Deutsch erhältlich -- Resume also available in German )*



**TEL** +49 **EMAIL** jhs[AT]berklix.com **WEB** http://www.berklix.com/~jhs/

**LOCATIONS** Munich & Aachen Germany, (& Tunbridge Wells, Kent, England)

**PRE-REQUISITES** No Smoke, No Microsoft, No relocation, No cubicle, Freelance only.

**EXPERIENCE** 45 Years Computer Telecom & Electronics Industry:

**Electronics** (since 1973), **Sys. Eng.** (since 1975); **Unix (since 1978)**, **C Programming (since 1982)**,  
 for Unix & Embedded **real time applications**; Hardware/software interfacing; **Sys. Admin.** (Firewalls, Mail  
 & Web Servers etc); **Porting & development to custom software requirements**; Telecom & Computer  
 system planning and development; Project costing & management.

**COMPUTER EXPERIENCE (\* T = Target System, H = Host System, C = Combined )**

HARDWARE	SOFTWARE	PERIOD	*	COMPANY
Various	Unix, Mainly BSD, See : <a href="http://berklix.com">http://berklix.com</a>	~ 2021 See Web For Recent Years	C	Vector Systems Ltd.
Intel 486	FreeBSD-4.9 & 10 <a href="http://berklix.com/scanjet">http://berklix.com/scanjet</a>	2003 & 4	T	Motorola, Texas, Denmark.
Intel 686	DNS, HTTP, SMTP: surfacevision, bsdpie, a monorail	2002 on	C	~
Intel 686	FreeBSD support, NCD & UPS config etc	2001 on	C	BSN
Intel 686	<a href="http://berklix.com">http://berklix.com</a> speculative investigation.	-	C	Vector Systems
Intel 5&686	Apache + C CGI: <a href="http://berklix.org/~jhs/ski/form.html">http://berklix.org/~jhs/ski/form.html</a>	-	H	Self
Intel 586	FreeBSD-4.4 4.8 & 5.1 + CD Mastering	2001 - 2003	C	VSL (DDJ etc).
Intel 686	Linux + GNU tools	2001	C	Speech Design, Germering
Intel 686	FreeBSD-3.4 + Firewall	2000	C	Vector Systems
Intel 586 + SCO-5.0.5	FreeBSD-3.3 + Motif/Lesstif-0.89	1998-1999	C	OPS(OCE) Poing
Intel 586 + HP	FreeBSD 2.2 & HP-UX 10.3	1997.07-1997.12	C	Dasa Ottobrunn
Intel 486 + HP Risc	FreeBSD 2.0.5 & HP-UX 09	1996.06	C	BLV (Thyssen)
Intel 586	FreeBSD 2.1	1996.05	C	Ditec Munich
Intel 486	Suse Linux + FreeBSD 2.1	1996.03	C	Dekra Akademie Mu.
HP 827	HP-UX 9.0	1995	C	Siemens Nurenberg
Dec Alpha	OSF1 V2.1+X11R6	1994-1995	C	Tech. Univ. Munich
Intel 486	FreeBSD,(BSD4.4),X11R6	Since 1994	H	Vector Systems
Intel 486	386BSD,(BSD4.3),X11R5	1993-1994	H	Vector Systems
Intel 486	SVR4,X11R5	1992-1993	H	Vector Systems
Intel 486	SCO SVR3 +X- Windows	1992-1993	T	Siemens Hofm. Str.
NSC 32532	Mach, Minix, NetBSD	Since 1991.02	C	Vector Systems
DEC VAX 11/780	Unix V7 (IS 3.1)	1990	C	Siemens Hofm. Str.
Symmetric(NSC 32016)	Unix BSD 4.2	Since 1988.02	H	Vector Systems
Microwave signal generator	VRTX,80186,C	1988.02-1988.11	T	Rohde & Schwarz
Rohde & Schwarz PC AT	Msdos 3.2+Sun PCNFS	1988.02-1988.11	H	Rohde & Schwarz
DEC VAX 11/780	IS3 (Unix V7)	1986.09-1987.10	C	Siemens Hofm. Str.
DEC PDP 11/70	IS1 (Unix V6)	1986.04-1987.10	C	Siemens Hofm. Str.
Siemens PC XT	Msdos 3.10	1987.01-1987.10	H	Siemens Hofm. Str.
Toshiba T1100+ & NEC	Msdos 3.2 & Minix 1.3	1987.06-~1991	H	Vector Systems
NSC 32016	Sinix V2.0	1986.02-1986.06	C	Siemens Perlach
Intel 80186	Sinix 1.0C	1985.07-1986.06	C	Siemens Perlach
Siemens PCX,MX,MX2	Sinix/(Xenix/Unix V7)	1985.07-1986.06	C	Siemens Perlach
VAX 11/750	Unix BSD 4.2	1985.07-1986.06	H	Siemens Perlach
NSC 32016	Own Software	1983.03-1985.06	T	Vector Systems
Zilog System 8000	Zeus2.2 (Unix V7)	1984.01-1985.06	C	BT International
Model 30 & 11++	Zeus3.21 (Unix S3)	1984.01-1985.06	C	BT International
DEC VAX 11/780	VMS User+Management	2 Week Course ~1985	H	BT International
Tandem	Guardian (Non Stop)	3 Week Course ~1984	C	BT International
Motorola M68000	Versados (assembler)	1 Week Course 1984	T	BT International
Intel 8086	iRMX86 (+ ICE86)	1 Week Course 1981	C	BT International
Intel 8086,8,& 9	(Hardware & Software)	2 Week Course 1981	C	BT International
Intel 8080 MDS	ISIS-II	2 Mth. ~1980	C	BT International
Mostek Z80 MDS	FLP80-DOS & CP/M	8 Mth. 1980-1981	C	BT International
Motorola M6800	SWTPC Monitor	2 Yr. intermittent 1979-1980	T	University of Kent
LSI M3, Xerox,BT	CP/M (C80,WS,BDOS)	1980-1988 intermittent	C	Westhawk
DEC PDP 11/40	Unix Version 6	1978.04-1980.07 intermittent	H	University of Kent
Burroughs B6800	CANDE	4 Mth. 1979.06-1979.09	C	BT International
ICL 2960 (+ 4130)	VME/K,EMAS (+ KOS)	2 Yr. intermittent 1977-1979	C	University of Kent
Prime/Telenet	IPSS Net. Ctl. System	3 Mth. 1977	C	BT International
Hasler M110 & M150	Message Switcher	3 Week Courses ~1976	T	BT International
HP Minicomputer	Assembler	2 Week Courses ~1976	T	BT International

**LANGUAGES & TOOLS : EXPERIENCE**

<b>Preferred:</b>	C, Unix, bsd make, bind/named, apache, cvs/sccs, gdb, bsd kernel config, X- Windows, Groff, Html, Sendmail.mc, M4 etc.
Competent in:	Tcl/Tk, TCP/IP, Apache, BSD-IPFW, Named(Bind/DNS), PLF/PLM/PLZ, Algol, Basic.
Have Used:	C++, CGI Perl, <b>Assemblers:</b> NS32000, M68000, I8086, M6800, Z80, <b>Macros:</b> ML1.
Some Experience:	HP-Mini, I8080, Z8000, and PDP11 Assembler, Ada, Pascal, Fortran, Forth.

**UNIVERSITY**

Bachelor of Science, Honours Degree 'Computers and Cybernetics', University of Kent at Canterbury, England. Graduated 1980. (+ prior Electrical & Electronic Engineering 1st year pass, Leeds University 1974+6 ).

**WORK EXPERIENCE (newest first, • = Own work, ○ = Group project).**

<b>TECHNICAL DIRECTOR : Vector Systems Ltd</b> ☞ <a href="http://www.berklix.com">http://www.berklix.com</a> .	<b>2001 - 2021</b>
• Project budget negotiation, Team recruitment & management, Development & support, Prosecution of debtors, Corporation Tax etc. Confidential. List skills needed, I'll tell you Yes or No & where [else] to ask.	
<b>SCANJET FreeBSD CONVERSIONS for Motorola &amp; others</b>	<b>-</b>
• NT to FreeBSD conversions : Ref. <a href="http://www.berklix.com/scanjet/">www.berklix.com/scanjet/</a>	
<b>DEVELOPMENT for Vector Systems, Munich</b>	<b>2001</b>
• Bootable custom CDRom Mastering, FreeBSD 4.[3-5] based.	
<b>Linux &amp; GNU Tools etc for Speech Design, Munich</b>	<b>2001</b>
• Linux [Debian + Suse] + GNU Tools	
• Advice on Software Patents, FSF & BSD code embedding right etc.	
<b>DEVELOPMENT for a customer of Vector Systems, Munich</b>	<b>2000</b>
• Internet planning for new empty site, inc. hardware ISP rack & cable provision, Internal, firewall, & web external FreeBSD-3.4 servers. Implemented 3 server system, extending to 5 server inc. diskless configuration.	
<b>DEVELOPMENT For OCE Printing Systems, Poing</b>	<b>1998-1999</b>
• Development of C, X-Windows & Motif application, Target: Intel 586 + SCO-5.0.5 + Motif then Lesstif, Host: FreeBSD-3.3 + Lesstif-0.89	
<b>DEVELOPMENT For DASA / Deutsche Aerospace, Ottobrunn</b>	<b>1997.07-1997.12</b>
○Development of interface for Aircraft structural design. TCL/ TK/ Tix, C etc.	
<b>FILE SYSTEM Data Rescue Investigation: Rank Xerox, Berlin</b>	<b>1997.04</b>
<b>DEVELOPMENT For Vector Systems</b>	<b>1997.02-1997.03</b>
• Development/ improvement: ISDN, TCP/IP etc.	
<b>VT220 EMULATION &amp; EDITOR : BLW (Thyssen)</b>	<b>1996</b>
<b>WEB CONFERENCE PAGES: Ditec, Munich</b>	<b>1996.05</b>
• Page preparation: Data Warehousing Europe '96 conference, & RAID '96 conference.	
<b>LECTURER : UNIX SYSTEM ADMIN.: Dekra Akademie, Munich</b>	<b>1996.03</b>
• Lectured for 2 weeks in German, to 17 people with individual PCs. Determined syllabus, inc. System 5 ( SVR4 ), Berkeley ( BSD ), Linux. Installed FreeBSD. Set & marked own exam.	
<b>WEB CONSULTANT: PRE- LAUNCH SUPPORT: Europe Online, Munich</b>	<b>1995.12</b>
• Pre launch support: Repaired World Wide Web ISMAP control files, & HTML links etc.	
<b>WEB TOOLS &amp; CONFIGURATION: Siemens, Nuremberg</b>	<b>1995</b>
• Corrected web server configuration, wrote World Wide Web CGI test scripts, obtained Oracle database interface tools, assessed CGI/ forms scripting macro tools.	
<b>CONSULTANCY (ANALYSIS): Customer of Vector Systems, Munich</b>	<b>1995</b>
• Consolidation of inter- operability of networking components for future product.	1995
• Prepared infrastructure for an Internet Web press presentation.	1995
Planned cheap Internet server to save a customer considerable money.	
<b>X11R6 X-WINDOW SYSTEM PORTING: Munich Tech. Univ., CAD Dept.</b>	<b>1994-1995</b>
• Installation & support of X-Windows X11R6p11, for DEC Alpha Computers	1994
• Porting various support programs such as CMU/Sup to Sequent.	1994
<b>DEVELOPMENT SYSTEM EXPANSION: Vector Systems</b>	<b>1993-1994</b>
• Support of large FreeBSD system. Contribution to source of FreeBSD project	1993-1994
• Development of gateway NetBSD system. Contribution to source of NetBSD project.	1994
• Various minor kernel modifications, (such as memory resizing, default parities etc)	1993-1994
• Porting various support programs such as CMU/Sup to PCS-Cadmus.	1993-1994
• Porting Eprom burner driver to FreeBSD (Unix) (incomplete).	1994
<b>RUSSIAN X11 TOOLS DEVELOPMENT: Siemens, EWSD Hofmann Strasse</b>	<b>1992-1993</b>
• Development & Implementation of a 3 language Cyrillic/ German/ English screen/ Keyboard/ Laser printer combination with X-Windows, for SCO,( & also Unix SVR4 & BSD). Inclusive of BDF to HP PCL5 Font converter tool, Cyrillic & custom font manufacture.	
<b>DEVELOPMENT For Vector Systems</b>	<b>1991.01-1991.06</b>
• Building of a PC532 (25MHz NSC 32532 CPU, 32381 FPU, 32202 ICU, NetBSD (+ Minix 1.3/5 + Mach), 8 TTY, 8M 70nS RAM, SCSI 300M Disk). Development/ improvement: GCC, Gh/ Postscript, & other FSF tools, Modem connection, SLIP TCP/IP + uucp/ email + slip, Nroff driver for HP3P laser etc.	
<b>REVERSE MACRO DEVELOPMENT Siemens, EWSD Hofmann Strasse, Munich</b>	<b>1990.01-1990.10</b>
• Customer specific data conversion (reverse macro) tool.	
<b>DEVELOPMENT FOR Vector Systems</b>	<b>1989.02-1989.12</b>
• Unix/ Msdos Directory/ tree transfer coms. prog. in C. skips unchanged files, maintains datestamps, supports inter computer pipes.	
• Rescue tool for physically damaged floppy discs (written in C for Msdos and Unix).	
<b>REAL TIME CONSULTANT: Rohde and Schwarz. Munich</b>	<b>1988.02-1988.11</b>

Wrote self test software for 15 GHz microwave sweep generator/ sawtooth oscillator & analyser. Developed self test software working across 2 80286 processors via a VRTX real time kernel, using Microsoft C Version 4, Hitex ICE Emulator, Eprom'able code. Programmable adjustment of tunable filters & YIG/ YAG components to minimal/ maximal power consumption tests. Control & compensation of analogue/ digital interfaces. Run time evaluation of impedance networks using Kirchoff's laws. Model names SWM & ZAM. 1 Year project.

**COMS. PACKAGE DEVELOPMENT: Siemens, EWSD Munich Hofmann Strasse 1986.09-1987.10**

- Designed and implemented an overlay package to add task interleaving and multiple priority facilities to existing VAX Unix V7 'FTSinix' to BS2000 (IBM) file transfer program. Implemented with German functionality, and documentation.
- Ported package above to also run on a PDP 11/70 running Unix Version 6, with RJE (Remote Job Entry).
- Development study for control system for telephone exchange development documentation dept.

**CONSULTANT: Siemens Perlach Munich, Sinix Development Dept., Unix Release Engineer 1985.07-1986.06**

- **Production & automation of Unix** Sinix Software for 8 European languages & 2 CPU families (NSC-32x32 & I-80x86): developed & documented tools; cooperated with source code control personnel; produced earliest languages; trained personnel, guided & supervised personnel for later language production.
- Developed parallel multiple language simultaneous compilation capability.
- Top Makefile written to compile Sinix & all packages in 1 language. Shell to produce 7 sequential multiple language versions of Sinix through a weekend.
- C compiler & Yacc improved, to select correct language library.
- Wrote Makefiles for libraries, delivery tree production, etc.
- Improved & extended countless existing Makefiles.
- Produced a standard Siemens style product floppy, to convert a Sinix system to a Sinix production/(compilation) system.
- Wrote program to check & duplicate product floppies.
- Specified & supervised a production support program. (A Zilog style `upkeep`).
- Made floppy production tools faster & network independent.
- Production logins secured.
- Documentation of automation work and recommendations for future work.

**ASSISTANT EXECUTIVE ENGINEER, British Telecom International, London, England 1980.07-1985.06**

- **Unix System Administrator** + Computer Centre & Network Support: Assessed, purchased & installed hardware & software packages, Established automatic system integrity and user data security package & procedures. Optimised system configurations (disk layouts & networks). Provided user technical support. Managed Ethernet + associated peripherals + technicians. Installed operating system & package upgrades. Interfaced computer systems and peripherals. Supervised student projects.
- Manned BT International Exchange during service crisis. (Using PTT 3.4 KHz \* 12 \* 5 \* 13~15 Frequency modulation system, including upper/ lower sideband, pilot levels, carrier regeneration etc).
- Installed Unix C to Z80 Cross Compiler, developed stack frame compatible IO routines, + down loader for target Z80. Beta testing of replacement compiler. Developed base for a table controlled terminal emulator.
- Unix Administrator: developed system, trained colleagues & successor.
- Specified 70 Screen 2 Gbyte high reliability database.
- Designed and implemented hardware and software for a Z80 SIO device driver on a Mostek micro development system (in Z80 Assembler for MK3884-7).
- Automated calculation of (a) noise, and (b) pulse voltages, induced in many miles of telecommunications lines from vaguely adjacent (a) electricity power supply grid during short circuit surges, and (b) railway lines with train power pickup conductors sparking; to evaluate EMI, with respect to (a) requirements for gas discharge tubes for human protection, (b) noise induced affecting signal/ noise ratio. (Program written in Algol).

**UNIVERSITY PROJECTS Canterbury, Kent, England 1977.10-1980.06**

- Designed, built & tested plotter/ printer mechanics, power electronics, & software (in PLF, like PL/M).
- Implemented parallel & serial port interrupt components for a floppy disk file system (in PLF for M-6800).
- Developed multi input data logging micro system (in PLF for M-6800).
- Wrote multiple function plotting program, with automatic floating point self scaler and offset (in Basic).

**ASSISTANT EXECUTIVE ENGINEER, British Telecom International, London, England 1975.02-1977.09**

- International Packet Switching System: profitability costing, systems planning, installation, configuration, testing, linking to American Telenet System. 'Prime' computer hardware.
- Time Multiplexed 50 Kbit/s Satellite Link: Experimental viability testing of Canadian Link, Cascaded multiplexers ( { 50 Kbit/s > 24 \* 2.4 Kbit/s } + { 2.4 Kbit/s > 50, 100, 110, 200 & 300 bit/s } ). Testing experimental FIFO buffer to compensate for varying satellite propagation loop delay (due to both shorter term atmospheric perturbations & longer term satellite path drift).
- Testing of experimental 50Kbit/s time multiplexed satellite connection to Italy. via COMSAT SPADE. (COMSAT = **C**ommunications **S**atellite Corporation, USA; SPADE = **S**ingle channel per carrier, **P**ulse code modulated, multiple **A**ccess, **D**emand assigned, **E**quipment).
- Implementation planning 4.8 Kbit/s commercial time multiplexed service to Canada.
- Designed & produced extra PCBs for Hasler M150 telegraph message switcher.
- Costed and designed a telegraph speed and code converter. 5/7 Unit, 50/2400 baud etc.

**TEST TECHNICIAN, Time Electronics & Feedback Instruments, Kent, England 1974.08-1975.01**

- Oxygen analyser and extremely high precision voltmeter.

**VARIOUS OTHER COMPUTER EXPERIENCE**

- Lecturer for Faraday (Electrical & Electronic Engineers) e.V. [www.berklix.com/free/talk/](http://www.berklix.com/free/talk/) 2007 & 2013
- Organiser SFD Software Freedom Day [www.berklix.org/sfd/](http://www.berklix.org/sfd/) 2010 & 2011
- Exhibitor of BSD Systems @ Vintage Computer Fest Europe ([www.vcfe.org](http://www.vcfe.org)). 2000-2005 etc
- Supported Munich Council's dumping Microsoft for Linux [www.berklix.com/~jhs/stadtmuemchen/](http://www.berklix.com/~jhs/stadtmuemchen/) 2003
- Stand Organiser for BSD- Unix @ Linux Park, Systems Exhibition 2001
- Co Founder of BIM ( [www.berklix.org/bim/](http://www.berklix.org/bim/) ) & MECC ( [www.berklix.org/mecc/](http://www.berklix.org/mecc/) ) 1999 on  
BIM= Berkeley In Munich MECC= Munich Electronic & Computer Consultants
- System Administrator for BIM: Berkeley in Munich ( [www.berklix.org/bim/](http://www.berklix.org/bim/) ) 1999 on
- Code contributor to FreeBSD ( [www.berklix.com/~jhs/src/](http://www.berklix.com/~jhs/src/) ) 1994 on  
Src/ diffs + ports/ Hylafax, Exmh, Estic ports wrappers etc.
- Member of the XFree86-3.0D beta test team. 1994
- Ported: Minix 1.2 to Toshiba T1100+, modified: driver for higher density Floppies. ~1989
- Wrote Unix style overlay for Msdos. ~1986-90
- Started English Firm, recruited & managed other programmers. " 1986 on
- Prepared business plan to found a company in UK designing Unix computers. ~1984
- Designed and built hardware & software for an NSC 32016 16/32 bit system ~1983

**NATIONALITY** **British** (& both parents); Security cleared by Royal Air Force Volunteer Reserve & British Telecom)

**SECURITY** I've never been near political or religious extremism; I abhor drugs & never touched them; No police record. Alcohol only in moderation, Never any driving & not till after work. No epileptic or similar machine control risk liability. Not colour blind (eg re. wiring & resistor codes & reaction buttons).

### PERSONALITY

I enjoy computer development (soft & hardware), & participate in public source projects, eg [www.freebsd.org](http://www.freebsd.org) etc. I do not touch Microsoft or games. Organiser for various groups [www.berklix.org](http://www.berklix.org) Berklix (& Ex GEA: German English Association) Beer Gardeners weekly, wind surfing, ski, bike & hiking trips, barbecues, firework displays, elections, web & mail lists. Support democracy, (I ran & enforced clean elections for UKC/SU & GEA; urged elections for FreeBSD core (later accepted); complained to British Consul re. 2009 Munich mass EU election registration failure, & promoted registration for 2014 election).

### NON- SMOKER

**I require smoke free offices. I declined to renew a contract in a smoked office.**

### LANGUAGES

**Native English, Fluent German** (I happily negotiate & win legal contract terms, but my grammar is poor, esp. written) . I can read French (but rusty), I understand a reasonable amount of French if spoken slowly & clearly.

### CAR DRIVER

Estate Car (Station Wagon) in Munich, German licence issued , UK licence issued 1974

### PERMITS

Unlimited German residence permit (& still so post Brexit). Registered at Munich tax office.

### OWN RESOURCES

Equipped to work in my office, your office, & remote via Internet :

- **Internet Connectivity:** DSL 16Mb/s flat rate connection. 2 Firewall Gateways, Multiple mirrored permanently connected (24/7) Internet servers at 2 remote sites. 5+ domains.
- **Computers: approx.20+ Unix Systems inc. : FreeBSD & Ex NetBSD:** NSC 32532; **2 UPSs** (Uninterruptible Power Supply) secure power for gateways, internal servers, fallback PBX, fax etc. 2 PBXs, multiple switches/hubs (fallback reserve).
- **Test Gear:** Logic Analyser, Oscilloscope, DVMs, Eprom eraser & programmer.

### STANDARD & PROPRIETARY SOFTWARE PACKAGES AVAILABLE

My own bootable encrypted USB stick, (& prior CDROM)self mastered with FreeBSD ([www.freebsd.org](http://www.freebsd.org)), is available to embed customer products on, with X-Windows, and any of 24064 (@ 2014-10-02) BSD, & other packages available, plus customisation, compilation, installation, configuration, & support. DSL + ISDN Auto answer+ dial- on- demand+ timeout, & Firewall, Web HTTP, FTP, SMTP via UUCP, PPP, IMAP, Popmail, Email to fax servers. Custom packages: Cyrillic/ Chinese/ German/ English X-Windows + keyboard + printer environment; Screen & printer BDF/ PCL font conversion tools etc **Sources:** BSD automatically updated via net. CVS).

### PRODUCTS & DEVELOPMENTS: Web, Internet, X-Windows, Unix Servers.

In addition to Internet Unix & FreeBSD X-Windows, Firewall, Server & Workstation systems; Support, custom development and tools for various other systems is also available.

### TYPESETTING of this resume)

This resume was prepared using a self developed WYSIWYG mechanism (vi make groff ghostview, + automatic Sigusr1 signal) plus an English/ German language filter, + Groff, & Ghostview (Postscript previewer) using X-Windows & FreeBSD (Unix) Optimal Format: A4 paper with Postscript, PCL or BJC. Ascii Format OK, HTML format poor (back end tool). (The WYSIWYG mechanism is also available for Chimera (a web browser), & Xfig (a figure generator), & is extensible.

### NEWEST VERSION: ☞ <http://www.berklix.com/~jhs/cv/> + Company projects ☞ <http://www.berklix.com>

In English & German. : PDF, Postscript, Plain Text, HTML, ( No MS Word, monopolist proprietary non standard).

See Pages 5 & 6 for Annexes:

**Limited Driver & Kernel Exposure + Management & Organisational Experience + Agents & Recruiters Notes**

**Page 5 : Limited Driver & Kernel Exposure** ( Beyond { Unix since 1978 + C since ~'81 + BSD since UCB 4.2 + FreeBSD patch-set contributor before FreeBSD adopted versions numbers, eg inc. 386BSD) } )

- 6800 parallel port relay & stepper motor control, designed developed built tested & documented hardware & software.
- Wrote Z80 embedded sio driver (interrupt with watchdog polling);
- Hardware & software design & build of an NSC 32016 prototype microcomputer inc. monitor in C + hand assembly of test loop, tested with logic analyser; (followed by work toward building a product & company).
- Read parts of Lions' book & bits of code on Version 6 Unix (Around '82). [https://en.wikipedia.org/wiki/Lions%27\\_Commentary\\_on\\_UNIX\\_6th\\_Edition,\\_with\\_Source\\_C](https://en.wikipedia.org/wiki/Lions%27_Commentary_on_UNIX_6th_Edition,_with_Source_C)
- Enhanced Minix floppy driver to double the capacity;
- Searched for tape driver bug on Symmetric 375 (BSD 4.2) (but link-able kernel modules had other bugs, so wrote recovery program instead).
- Run time init for VRTX RTOS devices,
- Looked in FreeBSD kernel re 16M bounce buffers & cache etc.
- Rolled custom kernel FreeBSD configs for decades,
- Looked for clues to failure & chip-sets etc in FreeBSD drivers (last urtwn, re. heat, still pending).
- 3 of Addison Wesley series "Design & Implementation of \*BSD.." on the shelf.
- Nothing big yet, always something else more urgent to fix or develop, but interested to do more.

**Page 5 : Management & Organisational Experience**

Liason operational & projects departments & suppliers, BTI london.  
Chaired Student Union Elections Committee: Managed election of ~2,500. chaired unruly meeting of many hundreds, after previous 2 chairs no confided.  
Business plan & Venture Capital seeking, Canterbury (NSC 32016).  
Team of 2: assessing & specifying 1 million pound database (1983 prices).  
Responsible for DP esp. Unix services to 30 developers, BTI London.  
Managing 2 technicians for BTI, London.  
Supervision of student project, BTI, London.  
Responsible for Siemens 7 language 2 CPU architecture production.  
Created Vector Systems Ltd, sought & found work for associates.  
Organised countless ski trips for up to 38 people in 13 cars.  
Recruited & installed programmer for VSL on 3 Siemens developments.  
Recruited & flew over kernel programmer to present to Siemens.  
Landlord of 2 UK rental properties ... tenant relationships.  
Sys. eng. requirements: design, budget, lethal floor loading alert.  
Lecturing in German (& controlling some !) & examining for Dekra.  
er for elections & firework launch teams of sports & social club.  
Organised organisers of ski trips & beer garden trips.  
Created & run many mail lists on <http://berklix.org>  
Host other peoples domains & lists on Berklix servers.  
Created & organised <http://berklix.org/bim/> & <http://berklix.org/mecc/>  
Organised BIM exhibition manning for Elektronik Boerse & Systems Expo.  
Team assembly, management, & use of lawyer to sue debtor.  
Recruited team of speakers for <http://berklix.com/free/talk/>  
Management of Vector Systems Ltd, UK, inc. company tax etc.

**Page 6 : MONEY, CONTRACT TERMS, & AGENTS & RECRUITERS:**

**German / Deutsch & French / Francais @ <http://www.berklx.org/trans/>**

**Contract Terms: Preamble**

- That the employer (or agent) will pay the contractor does Not entitle the employer or agent to offer one sided contract terms.
- The contractor will not be forced into a defensive position of arguing against a Client's initial sometimes predatory clauses, sometimes argued as supposedly 'standard' (from employers one sided view).
- A reasonable balanced contract is easy for Both sides to sign. Agressive one sided contracts are rejected & business does not start.
- Contractor is just as free to reject Client's terms & job, as Client is also equally free to reject Contractor's terms & services.
- Don't waste time offering one sided contracts.
- I have frequently rejected contracts with un-balanced terms.
- I'm a professional, contracting & negotiating 35+ years since 1985.
- Contracts must be balanced for both sides, else Not signed & no work starts. The money & the work are of equal value, else the price would rise, Both contractual partners are Equal in negotiation, neither has the right to shove their draft contract on the other.
- Employer or agent contract terms if received are treated merely as a first suggestion for consideration, equally if contractor offers employer or agnet contract terms, treat them the same.
- Both sides should offer reasonable terms for quick acceptance, not one sided terms that foolishly delay or prevent business.
- Technical project managers (usualy employees) often don't realise when they let their company lawyer provide a contract unchecked, such contracts often seeks to prove lawyer's worth to the employer, by over- securing employer's interest at the expense of the contractor; that agression delays or kills business when sensible contractors then reject un-balanced terms.
- Project manager should, (though they don't always) skim any such "standard" contract their lawyer provides, with the eyes of a contractor, to check its roughly balanced, before sending it to the contractor, so avoid wasted time when it's rejected.
- As a professional engineer with decades of experience, I'm aware of many agent ploys that delay & deter business agreements, often such foolishness is tried by young recruiters with far less experience, who haven't yet moved on, & haven't yet learnt: Don't be too agressive, don't waste our time, annoy, & promote dis-trust, as it Stops business contracts.  
Some examles of agents ploys are at: <http://berklx.org/mecc/#false> One more example to beware: They sometimes sign up workers exclusively, then keep them on hold unpaid, unable to work elsewhere, then delay as they still havent signed up the employer ! Dealt with by having an "Ausfallhonorar" in contract, so agent must pay half of daily rate for each day the job is delayed not through fault of worker. (Shades of UK "Zero Hours Contracts?)

**Partial Deposit Pre-Payment:** I normally require an initial pre-payment from new customers to prove employer or agent can afford to pay & will pay at least some of the consultancy ordered. Amount negotiable. Early exit clauses OK. If you won't pay a deposit in advance, your last option is you can pre pay into an escrow account: The bank selection, & charity default recipient on failure by Date etc, all to be mutually agreed & your deposit paid before work starts. I've experience using lawyers for debt collection from dead beat debtors. It's extremely annoying, grossly inefficient, & not my profession, hence a deposit is required.

### **Consultancy Rates**

Are Negotiated In Euros Per Hour For Work in Munich or Aachen area, Germany Offices (mine or client's) **Outside Munich or Aachen commuter area, extra costs are charged:** Please do Not mislead your client or yourself by just multiply hourly rate by 8 hours/day & GBP/EUR to get some false Pounds Per Day rate ! You probably need to add German MWST (=VAT).

**Hourly Rates** in Euro or Sterling on enquiry. Currency Rates at <http://www.berklix.com/~jhs/rates/> A discount may be available for fast payment &/or some charity type work.

### **Consultancy Cost Component Examples For London or Berlin etc:**

#### **Consultancy On Site At Client, eg in London or Berlin:**

Initial week(s) on site, as determined by client & consultant (not agent) discussing technically, then periodically on site at client during development project, at an hourly rate somewhat more than the Munich/Aachen office rate. Typically no more than 32 Hours per week of work (Mon AM & Fri PM typically travelling).

#### **Travel Time between Consultant City & Client City:**

Payable by client at half the hourly working rate. (Neither client nor contractor to pay all wasted travel time.) Air Flight Costs Business rates as clients short term schedule changes preclude finding tourist rates. Weekly flights, or for days clients require visits. Trains usually less practical. Choice of planes, trains or rental car or own car is at Consultant discretion, Not client or agent. Client to pre pay travel costs before booking (as some clients pay too late, & occasionally go bust on the job, so contractor will Not use his own credit card!). Best that the secretary of client's project manager helps contractor find flights & deploys firm's debit card to pay for tickets.

#### **Remote Consultancy From Munich / Aachen Offices:**

Once consultant understands technical requirements of client, consultant reduces working presence in eg London/ Berlin etc to part time, doing most development in Munich / Aachen office, at a somewhat cheaper rate with no expenses, & as no travel, more work done, typically 40 hours per week.

**Transport Costs In Client City** Airport/ hotel/ client office taxi/ train as appropriate. ( Agent to offer estimate of what consultant needs to charge, as agents often keep client locations secret, & only agents know geography & transport infrastructure between airport, client office & hotels, & eg London & Berlin conurbations are huge.)

#### **Hotel Costs:**

Business rates, clients schedules preclude tourist rates. Agents alone know client location, what other local events may affect hotel occupancy & transport, all unknown to consultant (eg Munich Oktoberfest & Hanover Computer Fair occasionally book out all hotels for 100+ Km radius). If agents don't know their own city, they should find an estimate eg here <http://www.booking.com> (unlike most, bookings often flexible): No flat rental as project & rental termination/renewal dates mis-match, & it takes months to find a flat, & consultant should be working as a highly paid specialist, not wasting time seeking & arranging travel & accommodation, that could be done by secretarial staff of client or agent. One project after development I would have been required on site for delivery: my business partner thought he needed the security guards only available in his luxury hotel, so I told him I'd have to price a small room in same hotel for same security, he thought I didn't need his security. I refused the project. No loss :-)

#### **Foreign City Nightly Allowance:**

Cost of a cheap pizza & a beer alone does Not compensate business trips in foreign cities, alone & bored, meal followed by drink at pub or finding a cinema etc + transport. All major employers financially compensate employees who have to travel, above the price of hotel + meal, & I require similar reasonable commensurate compensation, though not luxury. Some places I won't go to or work for: too dangerous, whether biologically or criminal or vile governments, etc.