**Curriculum Vitae / Resumé**

Tobias J. Kreidl -- April 5, 2014

**Education and employment history:**

 1972: Graduated from Rolla High School, Rolla, Missouri, ranked 16th in class of 222

 1979: Ph.D., University of Vienna, Austria, Astronomy (with minor in experimental physics)

 1979-1980: Research Associate, Dept. of Physics and Astronomy, Ruhr University Bochum, Germany

 1980-1993: Astronomer, Lowell Observatory, Flagstaff, Arizona (astronomical research, computer

 systems management)

 1988-present: Adjunct Faculty, Physics and Astronomy, NAU College of Arts and Sciences

 1993-1994: Computer System Manager, Planetary Science Institute, Tucson, Arizona

 (computer systems management, research)

 1994-present: Systems Administrator/Programmer/Technical Webmaster, NAU Information Technology

 Services, Academic Computing (system administration, project management, budgeting/purchasing, security,

 OS patches/upgrades, custom application programming, backups/restores, service contracts, team lead duties,

 personnel management of 6-7 full-time staff and a variable number of students)

 Systems Analyst: Jul. 1994 - Jun. 1995
 Systems Analyst, Senior: Jul. 1995 - Aug. 1997
 Systems Analyst, Principal: Sep. 1997 - Nov. 1997
 Systems Programmer, Principal/Academic Computing unix Team Lead: Dec. 1997 – Nov. 2008

 Merged Academic Computing Student Computing and Networking Team/ACAD unix Team Lead: Nov. 2008- present

**Computer Hardware and Operating Systems** (**sysadmin and/or user):**

Digital Equipment Co.:

 PDP-12 (DIAL)

 PDP-11, LSI-11 (RT-11, RSX-11M)

 VAX-11/7XX, MicroVAX II, DEC Alpha (VMS, OpenVMS)

 Sun Microsystems:

 Sun 4/260, SPARCstation 1,1+,2,IPC,IPX (SunOS)

 SPARCstation 2/5, SPARCserver 1000 (Solaris 2.5, 2.6)

 Ultra 1, 5, E450, E4000, 2XXR, Netra, V2XX, V880, X4600 (Solaris 8/10)

 X86/AMD:

 x386, x486, Pentium I-IV, AMD Athlon (MS-DOS,Windows 95,98,NT2000,XP and FreeBSD,

 Red Hat Linux 8,9,AS3,AS4, RHEL 4,5,6, Sun Solaris 8,x86, a little Solaris 10)

 Miscellaneous/Historic:

 SGI Iris(IRIX), HP3000(BASIC), Control Data Corp. Cyber-73 (NOS/BE), Motorola 680XX(Linux)

 Peripherals:

 Disk connectivity: IDE, SCSI, ATA, SATA, Fiber Channel, SAS, iSCSI, KVM

 Disk formats: FAT 16/32, NTFS, DEC RT11/RSX/VMS, unix, Veritas vxfs, Linux ext2/3/4, LVM

 Disk drives/arrays: Nexsan SATAblade, Sun S1, D1000, A1000, T3, 6130 SAN, Dell MD36xxi, MD1200

 Tapes: 9-track, QIC 60,150, Exabyte, DAT, DLT

 Networking/Connectivity: McData Sphereon Fiber Channel controller, Ethernet hubs, switches

 Hardware installation: networks, cables, disks and disk arrays, memory, Ethernet/fiber channel/disk

 controller cards, etc.

 Printers: impact, inkjet, laser – directly attached and network printing

 Modems: various models through 54 kbaud, as well as DSL

**Programming Languages:**

FORTRAN II, IV, 77 (some FORTRAN 90)

 BASIC, FOCAL

 C, perl, some C++, a little java, Makefile, some CVS/Subversion, some python, HTML, some XML/XSLT,

 sh, csh, some ksh, expect scripts

**Applications:**

 Shell environments/scripts, stand-alone perl, CGI routines using perl, C, etc.

 Apache 1.X, 2.X servers including SSL mod\_security and mod\_evasive, some BEA Weblogic and

 tomcat server experience,

 .htaccess, security, virtual hosts, some CAS and other authenticators, various CMS (WebCT, Vista,

 Webcaucus)

 PKI SSL certificate license management with Thawte as chief security officer for SSL certificates, as well as

 With GloBalSign and most recently, InCommon

 Sun, Red Hat and Citrix software and hardware licensing and service contract management

 License management for IBM/SPSS, SAS SAS/JMP

 Samba, ColdFusion, some SQL\*PLUS, some Oracle 8,9 and MySQL client installation experience

 Sendmail, Postfix, POP, IMAP, POPS, IMAPS, pine, policyd, some amavisd-new, TCPwrappers and some iptables

 Sockets, ssh tunneling, some SOAP inter-machine connectivity, Sun SGD (Secure Global Desktop), some

 VMware ESXi, Citrix XenServer 5.X – 6.X, some Citrix XenDesktop, quota, vxquota, automounter (autofs),

 directory exports/imports, Dell MDSM, Cisco FWSM firewall

 System custom logs, monitoring routines, Orca, Nagios, Web stats, account building/maintenance/tracking

 Interfacing with LDAP and CAS services; EZproxy (oclc.com), DNS services

 Symantec Veritas File System and Volume Manager 3.X/4.X, meta devices, Veritas Netbackup products

 Sun DiskSuite meta devices; hardware and software RAID management, Dell PERC hardware RAID management

 Red Hat Linux AS High Availability clustering, VMware 5 desktop, some VMware ESX Enterprise Service HA,

 Citrix XenServer 5.X,6.X including high-availability and license manager (Enterprise and Advanced editions)

 Familiarity with procmail, spamassassin mail filtering tools

 Experience with security tools, sudo, satan, network monitoring and analysis, OS tuning

 Web authoring using vi, FrontPage, Dreamweaver; currently studying Fireworks, Flash, and CSS

 Security and emergency response experience, including 24x7 on-call duty for over 20 years

 Interfacing with law-enforcement agencies, including Flagstaff PD, NAU PD, FBI, Secret Service

 Experience gathering and providing evidence related to legal issues, searching through log files

 Windows applications, including MS Word, Excel, PowerPoint, Producer, FrontPage, some MS Project, Visio and

 Sharepoint

 OpenOffice equivalents to MS products (Writer, Calc, Draw, Impress)

 TeX, LaTeX, PostScript, Adobe Acrobat, Adobe Photoshop, Gimp, some Dreamweaver 8

 Subscribed to BUGTRAQ mailing list

 Astronomical image processing packages, such as Tololo-Vienna, IRAF, some IDL

 Search engine server installation and management, including Ultraseek, Inktomisearch, Glimpse, Excite,

 Google Mini Appliance and Google Site Search

 ssh, scp, ftp, sftp, syslog, VNC, VPN, private networks, NFS, rsync, rdist, cron, awk, grep, quotas, regular

 expressions, ufsdump, cpio, tar, etc.

 Programming computer-controlled instrument systems at Lowell Observatory (CCDs, spectrographs,

 photometers)

**Other Qualifications:**

 Over 120 astronomical publications (see http://www2.nau.edu/tjk/tjk\_publications.pdf)

 Familiar with astronomical research environment (over 25 years of experience), including writing and

 administration of NSF, NASA, IUE and other grants

 Expertise in computing and astronomical applications and facilities, planning, personnel and project

 Management, system architecture (have designed and implemented XenDesktop farms with > 300 units)

 Part-time instructor in Computer Science at NAU, 1982-1983

 Member of USENIX, American Astronomical Society/DPS, International Astronomical Union (past member of

 DECUS)

 Member of Coconico Community College Computer Science Advisory Council since 2006

 Worked as a private consultant on computer applications, system administration and networking

**Personal Information:**

 Born in Rochester, NY (1954) – US Citizen

 Married, 2 children; resident of Flagstaff, Arizona for over 30 years

 Languages: English, German, some French and Spanish

 External interests: music (guitar, bluegrass mandolin), skiing, martial arts, hiking, travel, languages, Web design

**Summary:**

 Over 35 years experience in astronomy and computing environments, including 21 years at universities

 Currently responsible for email, Web, authentication, file sharing, backup and recovery, account maintenance,

 OS and application software for 40+ Linux servers (most in virtualized environments) used by over 3,000

 faculty and staff and 26,000 enrolled students; on call 24x7. Liaison with university faculty and staff, as well

 as NAU Cline Library, on special projects.

 Supervises 6-7 staff plus 6-8 student workers; responsible for an up to $100k annual budget

 Knowledgeable about FERPA, system and network monitoring and logging, tcpdump, snoop and

 other security tools and procedures; experience with law enforcement agencies and legal proceedings

 Motivated, proactive, and attentive to the needs of organizations, as well as individuals

 Interested in finding practical and sometime innovative solutions to a variety of problems, researching new

 technologies and applications, long-range planning and project design.

**Contact:**

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