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Valentine Kouznetsov

Objective: A position of computer oriented scientist.

Background: Ten years in physics community (4 HEP experiments, 2 theoretical groups).
Eight years of experience in UNIX, Windows and low−level networking environments. Performed administration, installation, configuration, programming and troubleshooting.

Experience
experimental physics

Experiment	Physics	Responsibilities	Environment
June 1999 − present: D0 experiment at FNAL. post−doc, Univ. of California, Riverside.	Current interests are: B−physics (B_s−oscillations), Higgs/top search.	Co−leader of global tracking group. Support and management of global tracking software. Administration of clued0 Linux cluster	Linux (RedHat 7.x), IRIX 6.5. C++, Python programming languages.
1998 − 1999: NOMAD−STAR at CERN SPS. Scientific Associate, CERN.	Studying a new technique for next generation of neutrino oscillation experiments. Charm search. Electromagnetic properties of neutrino (part of Ph.D. thesis).	Leader of software development group. Off−line: reconstruction program (digitization, tracking, vertexing), event display. On−line: data management (decoding, transferring, digitization). Web support for NOMAD−STAR experiment.	Linux, OSF/1, SunOS, Solaris. C, Fortran programming languages, shell programming, GNU software.
1995 − 1998: NOMAD experiment at CERN SPS (WA−96). Jr. Scientific Associate, JINR (part time CERN).	Search for neutrino oscillations. D_s^* production. Dilepton production. Electromagnetic properties of neutrino. (part of my Ph.D. thesis).	Development of NOMAD reconstruction program. MC simulation of trilepton production in NOMAD detector (neutrino scattering in Coulomb field of nuclei). Transfer and support of NOMAD software to JINR. Organization of the local cluster based on PC/Linux in JINR. Porting of NOMAD software from DEC/OSF1 to PC−Linux.	Linux, OSF/1, SunOS, Solaris. C, Fortran programming languages, shell programming, GNU software
1993 − 1998: Neutrino Detector (IHEP−JINR) Jr. Scientific Associate, JINR.	Search for neutrino oscillations.	Monte Carlo simulation, neutrino oscillation studies.	Linux, VAX VMS, Windows, MS−DOS. Fortran programming language.

theoretical physics

1993 − 1999: Toroid Dipole Moment (TDM) of neutrino.
Studies of the third electromagnetic characteristics of neutrino, its TDM. One−loop calculations of the TDM and toroid form factor of neutrino. Investigation of experimental observations of TDM neutrino..
1991 − 1995: Berry's phases for neutrino physics.
Developing mathematical formalism for three−neutrino oscillations in inhomogeneous and absorbing media, based on the Berry's adiabatic approach. Studyies of three−level non−Hermitian systems.

Education:

August 1999: Object−Oriented Design and Programming in C++, by Glenn P. Downing Univ. Texas at Austin, Fermilab training, IL, USA.
July 1999: Fast Track to Objects, by ISS Inc. Schaumburg, Fermilab training, IL. Object−Oriented Analysis and Design using UML, by Objective Engineering Inc., Fermilab training, IL, USA.
May 1999: Ph.D. in Physics, Dubna, JINR, Russia.
June 1993: M. Sc. in Physics, Irkutsk State Univ., Russia.

Technical skills:

Computer Hardware:
IBM PC, DEC/Alpha, SUN, SGI workstations, X−terminals, Exabyte backup systems.

OS/Environment:
Linux: RedHat 4.x−7.x, Slackware
FreeBSD: v3.5
SGI: IRIX 6.5
DEC/Alpha: OSF/1
SUN: SunOS v4.1.4.1, Solaris v5.5.1
CDE 1.1, FWMN, KDE/GNOME−desktops.

Network hardware and protocols:
Ethernet, PPP over Dialup, TCP/IP, NFS, FTP, DNS, NIS.

Software:
languages: C/C++, Python, Fortran, basic knowledge of Java.
scripting: Born and C shells (sh, csh, tcsh), awk, sed, Tcl/Tk.
security: tripwire, SSH, Nmap, Nessus, port filtering firewalls, PAM authentication scheme.
miscellaneous: GNU development software, RPM software packaging, CVS revision control system, debuggers (gdb, dbx, DDD, TotalView), GUI (OnX based on Motif), VMware, Office Suites (Microsoft, Star Office, Applix).

Tasks and procedures:
system and maintenance planning, installation and documentation;
kernel installation and tuning;
building, installing and remotely deploying software;
planing and implementing system security;
shell programming;
backup planning and management;

Certificates:

issued by **www.brainbench.com** see **transcript #157359**

Administration, management:

Skillful organizer with experience in long−term research projects.
Experience of work as a member of large (over 500 people), small and international teams.
Familiar with handling of research grants and purchasing of equipment.
Day−by−day advice and leadership of students.

Personal:

Languages: Russian, English, French (basic).

Self−motivating with good communication and interpersonal skills.
Fast learner in programming languages.
66 physics and 2 software publications. A complete list is available upon request.

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