Oleg Y. Vdovin

1130 11th Street, Apt.5, Boulder, Colorado 80302
Tel: 303-449-5430 (h), 303-492-0463 (w)
FAX: 303-492-7935
E-mail: vdovin@lemond.colorado.edu
http://rtt.colorado.edu/~vdovin

Summary

I am looking for a professional position in the area of computer programming. I possess a very strong formal and applied background in software development, programming, data analysis and numerical computation. These skills are complemented by well developed analytical and problem solving capabilities polished by years of training as a professional physicist; excellent inter-personal and communication skills; the ability to learn new techniques, languages, and computing environments quickly and efficiently; the ability to teach effectively, the ability to work well both alone and within a team setting, and the capability to understand challenging problems and find efficient solutions within practical limitations set by the application and the client.

Programming Skills

Extensive creative programming experience in: C/C++, Unix shells (Bourne, C and K shells), PERL, Latex, HTML, Pascal, and Fortran.

Operating systems: UNIX (Sun OS 4.1.x, Solaris 2.5 and 2.6, HP), Windows 95, NT 4.0, MSDOS.

Software: WordPerfect 7, Microsoft Word, Excel, Generic Mapping Tools (GMT), GNUPLOT, IDL, Mathematica 3.0, MATLAB, IslandOffice, VI, EMACS, extensive experience with relational databases.

Education

Ph.D. (Physics) University of Colorado at Boulder, May 1999.

B.S./M.S. (Physics) Moscow Engineering Physics Institute, Russia, 1992 (GPA 4.0).

Additional courses: UNIX/C/C++ and High Performance Computing (Computer Science Department, University of Colorado, Boulder).

Ph.D. thesis: "Surface wave tomography across South America and Antarctica".

Professional Experience

1999 Teaching Assistant, Department of Physics, University of Colorado, Boulder.

1994 - present Research Assistant, Department of Physics, University of Colorado, Boulder.

1993 - 1994 Teaching Assistant, Department of Physics, University of Colorado, Boulder.

Four years of high level numerical and data analysis software development.

- Developed innovative software for the processing and analysis of large volumes of scientific data contained within heterogeneous relational data bases.
- Developed and applied advanced numerical techniques for data analysis, inference, and visualization.
- Performed statistical analysis and computer simulation on large data sets.
- Developed visualization software to understand and to extract salient information from spatial data.
- Developed and maintained Web pages for current research projects.
- Performed computer modeling of a laser working regime using C++.

Teaching Experience

•1993-1994, 1996 Teaching Assistant, University of Colorado at Boulder.

Supervised several undergraduate physics courses, continuously received highly positive feedback from my students, was an efficient and successful instructor in laboratory and recitation sections.

Awards

Fellowship from the University of Colorado (1993, 1997), Travel Grant from Coherent Inc. (1995) and NSF (1999).

Publications:

Vdovin O.Y., Levshin A.L., Rial J.A., and Ritzwoller M.H., Group velocity tomography of South America and the surrounding oceans, Geophys. J. Int, 136, 324-340, 1999.

Ritzwoller M.H., Levshin A.L., Barmin M.P., and Vdovin O.Y., Surface-wave dispersion across Antarctica: A first look, Antarctic Journal of the U.S., 1998 Semiannual Review Issue (1).

Vdovin O.Y. , Rial J.A., Ritzwoller M.H., and Levshin A.L., Surface-wave Inversion of the South American Litosphere (SISAL) A first look, EOS, Trans. Am.Geophys. Un., December 1996.

Vdovin O.Y., Rial J.A., Ritzwoller M.H., and Levshin A.L., Surface-wave tomographic inversion of the South American litosphere, The 29th General Assembly of the IASPEI, 51, Thessaloniki, Greece, August 18-28, 1997.

Vdovin O.Y., Ritzwoller M.H., Levshin A.L., and Rial J.A., Surface wave tomography of South America and Antarctica, EOS Trans Am. Geophys. Un., December 1997.

Renn M.J., Montgomery D., Vdovin O.Y., Anderson D.Z.,Wieman C., Cornel E., Laser-guided atoms in hollow-core optical fibers, Physical Review Letters, 75, 3253-3256, 1995.