Albert Dvornik
81 Bromfield Road, Somerville MA 02144

EXPERIENCE:

Real-Time Innovations, Inc. Medford, MA
Field Service Engineer/Senior Engineer July 2001 – current

Identify, isolate, debug and fix problems in all of RTI's software products running on various real-time and non-real-time operating systems. Address problems by generating and shipping patches and creating work-arounds. Provide support, design suggestions, training and other assistance to customers via telephone and e-mail, and during on-site visits. Create ports of software to new hardware platforms and/or operating systems, including code modifications, work-arounds for operating system deficiencies, testing, documenting and shipping. Perform exploratory research towards future company products or as part of externally funded contracts. Contribute to training new support and porting engineers.

GSI Lumonics (Memory Repair Systems Group) Wilmington, MA
Software Engineer/Senior Software Engineer March 1998 – July 2001

Developed control software for laser memory repair machines as a part of a small team. The machines fire a laser at a wafer of computer memory with sub-micron precision, cutting electrical connections in order to activate redundant rows. The software was written in C and C++ and consisted of an XView-based user interface running on a Sun workstation and a pair of VME-based real-time systems running VxWorks. In addition to designing, coding, and debugging parts of the software system itself, work has included writing serial drivers, examining generated 68060, x86 and PowerPC assembly, and analyzing behavior of the mechanical and optical components of the system.

MIT Information Systems (Distributed Computing and Network Services) Cambridge, MA
Student Developer February 1994 — February 1998

Maintained, debugged, and/or designed and wrote several client-server systems. Other tasks included upgrading and integration of free and commercial third-party software into MIT's Athena workstation environment.

MIT Information Systems (Computing Support Services) Cambridge, MA
Student Consultant February 1993 — December 1995

Worked for Athena's On-Line Consulting system, providing support to users of MIT-developed and third-party software installed on MIT's public UNIX workstations.

Institut za fiziku Sveučilišta u Zagrebu Zagreb, Croatia
student researcher Summer 1994

Worked on interpretation of thermal and electrical conductivity measurements of $K_{0.3}MoO_3$ ('blue bronze'). Published in *Synthetic Metals*.

MIT Center for Space Research Cambridge, MA
student researcher February 1993 — August 1993

Wrote parts of simulation and data analysis software for the MIT Faraday cup solar wind experiment which is a part of the WIND satellite, launched in November 1994.

EDUCATION:

Massachusetts Institute of Technology Cambridge, MA

Received a B.S. degree in Physics in February 1998. The work leading up to my thesis, *Quantum-mechanical return probability of a wave packet and its relationship to classical periodic orbits,* has primarily involved numerical simulation of quantum-mechanical and classical dynamical systems.

MISCELLANEOUS:

Skills

I have extensive experience programming in C and C++ and am familiar with the POSIX.1 API, "BSD-style" socket programming, and multithreaded programming using Pthreads

and VxWorks APIs. I have also written Perl and UNIX shell scripts. Operating systems I've worked with and developed for include Solaris, Linux, VxWorks, Windows, LynxOS and OpenVMS. I'm proficient with the use of debugging and source control tools.

Past computing projects

Designed and wrote a gateway server to provide Web access to a legacy MIT text conferencing system named Discuss.

Citizenship and visa status

I am a citizen of Croatia. I am currently working in the United States under an H-1B visa through my current employer.