Christopher J. Desjardins
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Online portfolio: http://www.chrisd.info/portfolio

GOAL:

- To become part of an intense software engineering team where I can make a big impact.

SKILLS:

- C, C++, Embedded Systems, Assembly, Microcode, MFC, Perl, MySQL, OpenGL
- RTOS, Device Drivers, Hardware Interface, Multiprocessor, Distributed Systems
- Quick learner, Highly observant, Effective Multitasker with lots of energy

WORK EXPERIENCE:

Tekelec, Real Time Application Engineer - Amsterdam, NL (2010-present)

- Member of an agile team that develops Linux and Solaris applications to facilitate mobile messaging (SMS), and related services.
- Develop next generation of subscriber database to manage 100 million subscribers in MySQL Cluster.
- Enhance perl scripts used for automated regression test in order to improve robustness and code coverage.

Tekelec, Embedded Real Time OS Software Engineer - Raleigh, NC (2002-2010)

- Member of a 10-person team that is responsible for developing a number of real time operating systems for a variety of embedded processors in C, Intel and ARM assembly; including:
  - Tekelec proprietary RTOS running on systems from the Intel 286 to the P4 Xeon, and Arm based IXP1250, IXP2350, and EP9312.
  - VxWorks RTOS running on systems from the Intel 386 to the P4 Xeon.
- Implemented a number of low level modules; including: exception handlers/NMI, ISRs, SMBus interface, bootloader code, in system programming for devices such as FPGAs, flash chips, and CPLDs, and device drivers for 24 port Ethernet switch.
- Designed a number of high-level modules; including: application error reporting interface, live system fail-safe software upgrade, thermal management module (patent pending), Inter-processor communication module, Multiprocessor File I/O device driver.
- Developed a core infrastructure test application; this test application consisted of a server running on embedded vxworks systems, and a MFC GUI client which communicates to the server over Ethernet.
- Collaborated with hardware team during board bring up for many new products.
- Troubleshoot, fix bugs, and develop enhancements in many different areas of the OS code base in both Rational ClearCase, and PVCS environments.

BOPS Inc., Embedded Applications Engineer - Raleigh, NC (2000-2002)

- Part of a team that designed, developed, tested, documented, and maintained a multi-platform real time embedded DSP OS. My responsibilities included RTOS design, host API design/development, compiler development, and system verification.
- Developed 2D/3D applications on the BOPS DSP core in assembly, such as OpenGL 3D lighting model, and a 3D rasterization engine with perspective correct texture mapping.
- Actively participated in many other projects through out the company including: coding standards committee, documentation standards committee, swat team, and the prototype team.

BOPS Inc., Tool Set Developer - Raleigh, NC (internship, 1998-2000)

- Developed and maintained the BOPS DSP simulator, MFC debugger, GNU assembler, and other GNU utilities targeted for the BOPS platform.
- Implemented directed test case generators in Tcl, to verify the BOPS DSP simulator, and RTL.

EDUCATION:

North Carolina State University, Raleigh, NC (1996-2000)

- Bachelor of Science in Computer Science
- Concentration in 3D/Stereo Graphics programming

ACCOMPLISHMENTS:

- US Patent pending: Methods, systems and computer program products for thermal management of a processor associated with a network interface
- Publication: MacAllister, David F; Desjardins, Christopher J. "Geometric image processing of stereo pairs." Proc. SPIE Vol. 4297, p. 317-327 Abstract available at www.spie.org.
- Avid programmer, world traveler, motorcycle enthusiasts, mountain biker, and scuba diver

REFERENCES:

- References available upon request.