Oren M. Laskin
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Education

Carnegie Mellon University, Pittsburgh, PA – May 2000
MS, BS, Electrical and Computer Engineering
Minors in Japanese and Robotics

Employment

NASA Dryden Flight Research Center, Edwards, CA (June 2004 – Present) – Aerospace Engineer
Cardiac Sciences, Irvine, CA (March 2004 – June 2004) – Software Engineer
O'Neil Product Development, Irvine, CA (Jan 2003 – Jan 2004) – Design Engineer
Gordian, Santa Ana Heights, CA (June 2000 – August 2002) – HW/SW Engineer
Caterpillar Inc., Peoria, IL (May – August 1998) – Software Tester

Work Projects

NASA DFRC Flight Systems Branch, F15 Intelligent Flight Control Systems – Systems engineer responsible for creating safety monitoring software for experimental online learning neural network flight control systems to be used to aid damaged aircraft. Responsible for the verification of the system integration between contractors and NASA equipment.

NASA DFRC Flight Systems Branch, Quad Redundant Flight Control System – Lead engineer responsible for designing a custom flight controller utilizing an FPGA with microprocessor core to enable DFRC to have a small, capable hardware platform for controlling small experimental aircraft.

Cardiac Sciences – Software engineer responsible for the programming of the embedded software used in automated defribillators including user interface, operating system kernel, and device drivers.

O'Neil Product Development – Design engineer responsible for designing a test fixture that verifies the printers are built correctly at the production house and all components are functional. Designed a device that would allow a battery powered printer to work off automotive 12V DC power.

Gordian MSS4 – Design engineer responsible for a network device that utilizes RS232/485 serial, ethernet, fiber optic, and dual PC cards from design stage to production including hardware design, software, FCC, CE, and UL certifications.

Gordian Linux port – Responsible for porting Linux to an ethernet camera as well as creating drivers to put images onto the embedded web server.

Skills

Programming Languages: C/C++, Fortran, Ada, Matlab/Simulink, Assembly on various platforms
Hardware Description Languages: Verilog, VHDL
Software: Pads, Innoveda EDA tools, Protel, Altera and Xilinx tools, Spice
CPU: PPC, ARM, MIPS, PIC, 68K, MCORE, HC11

University Projects

Mechatronics – Lead programmer and eletrical design in a four person project to create a mechatronic device capable of finding "mines" in an outdoor 15 foot by 15 foot area on a limited budget.

Mobile Robot Design – Software engineer responsible for creating a graphical simulation/visualization of Skyworker, a robot capable of walking along a truss structure created in space, and for installing and maintaining Linux on the PC104 controller of Skyworker.

Advanced Digital Design – Hardware/Software engineer responsible for leading a group that created an AI chess player on a microcontroller and FPGA codesign challenge. Focused on FPGA optimization methods, software codesign, and aiding in all testing and debugging.

Relevant University Coursework	Computer Graphics Signals and Systems Design and Analysis of Digital Circuits Design and Analysys of Analog Circuits Computer Architecture Image and Video Processing DSP-Robust Speech Processing Digital Communications and Signal Processing Systems Design Kinematics, Dynamic Systems, and Control
Japanese	Passed official Japanese Language Proficiency Test level 2. Beginner, Intermediate, and 4th year Japanese (5 semesters) at Carnegie Mellon University Advanced Japanese (2 semesters) – Princeton in Ishikawa Program (June – August 1999) During Princeton Program, lived in Kanazawa, Ishikawa with host family