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Luke Dupin

OBJECTIVE: Software Engineering position with the Bend Bulletin.

SKILLS:

- **Operating Systems:** Ubuntu and Redhat Linux, Solaris, Windows, and MacOSX
- **Programming Languages:** Action Script, Bash, C/C++, C#, CSS, HTML, Java, Javascript, Lex/Flex, Lisp, MXML, PHP, Pascal, Perl, Prolog, QBasic, Ruby, SQL, VB, Verilog, VHDL, and Yacc/Bison
- **Databases:** *LDAP, MySQL, Oracle, and Postgres
- **Frameworks and APIs:** Adobe Flex 2.0, Ajax, *DirectX, OpenGL, QT, Ruby on Rails, Java Swing, and Win32 API
- **Software Tools:** Gimp, Maya, MS Office, Open Office, and Visio

EXPERIENCE: **PV Powered Inc.,** **March 2005 – Present**
Data Communications Network Architect, Bend Oregon

- Designed cost effective and simple to install solar monitoring hardware for PV Powered Inverters.
- Designed and implemented embedded firmware for the inverter monitoring hardware.
- Designed a manufacturing test and programming station for the inverter monitoring hardware.
- Designed cluster ready data storage system that supports 60,000+ monitoring devices using the JMS messaging system and a clustered MySQL database.
- Designed and implemented an inverter fault tracking system used for customer service support and engineering in-field beta testing. The fault data provided key information, leading to the industry's lowest inverter failure rate of 0.1%.

GPS Navigation System Designer, **December 2007 – Present**
Aero Space Lunar Lander XPrize Team, Moscow Idaho

- Designing and implementing GPS fault tolerant navigational system.
- Designing way point tracking system.
- Networking communication system.

Algorithm Specialist, **February 2004 – February 2005**
Amplicon Express, Gene Sequencing Company, Pullman Washington

- Designed a recursive search algorithm to produce reaction statistics, thus acting as a genetic sequencing search engine.
- Online interface to register calculations through a scheduling system.
- Created particle swarm algorithm to generate distribution matrices based on predefined sequence parameters which created more accurate search results.

**Systems Administrator,
University of Idaho, I.B.E.S.T.**

January 2002 – March 2005

- Created an online user management system to work with 250+ users, across 4 different operating systems, onto an Oracle Database, using LDAP authentication. The system also tracks user time of usage, program usage and process run times to generate required statistics needed for the C.O.B.R.A. grant yearly renewal.
- Created temperature and processor usage monitoring system, that interactively scheduled processes, shut down overheating compute nodes, and display operational statistics online.
- Managed 128+ node Beowulf compute center.

EDUCATION: Bachelor of Science in Computer Science, December 2007
University of Idaho, Moscow Idaho

- ACTIVITIES:**
- Submission Fighting Club, 2005 – 2007
 - Motocross Club, 2001 – 2007
 - Snowboarding
 - Motocross Racing
 - Chess and other logic games
 - Outdoor enthusiast