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## Peter Newman

Objective	I am a highly flexible software engineer and server administrator seeking an exciting role in information technology development. I am highly experienced in rapid development of concepts and prototype systems in a limited time frame.
Notable Projects	<p><b>June 2009-Current: EvoGrid</b></p> <p>The EvoGrid is a worldwide, cross-disciplinary effort to create an abstract, yet plausible simulation of the chemical origins of life on Earth. One could think of this as an artificial origin of life experiment. Our strategy is to employ a large number of computers in a grid to simulate a digital primordial soup along with a distributed set of computers acting as observers looking into that grid. These observers, modelled after the very successful @Home scientific computation projects, will be looking for signs of emergent complexity and reporting back to the central grid.</p> <p>I am the Chief Engineer for this project, responsible for design, implementation of critical components, and managing contributing developers.</p> <p>Featured in New York Times - Web version at: <a href="http://www.nytimes.com/2009/09/29/science/29grid.htm">http://www.nytimes.com/2009/09/29/science/29grid.htm</a> More details on the project at <a href="http://www.evogrid.org/">http://www.evogrid.org/</a></p> <p><b>February 2009: Educational Spacewalk Simulation</b></p> <p>An educational software simulation developed for NASA, presenting the spacewalk aspects of mission STS-125. This was targeted at casual interest and high school students.</p> <p>This was delivered using the Digital Spaces engine, which I was Lead Programmer for while working for DM3D Studios.</p> <p>Available on NASA site: <a href="http://www.nasa.gov/audience/foreducators/spacesuits/simulation/index.html">http://www.nasa.gov/audience/foreducators/spacesuits/simulation/index.html</a></p>
Language Skills	<p><b>C/C++</b></p> <p>7 years of professional C/C++ development. Including modern language features of Standard Template Library and Boost Library. Development on multiple platforms.</p> <p><b>Python</b></p> <p>Integration and use as high level application logic in a compiled code application. Rapid prototyping.</p> <p><b>PHP</b></p> <p>Support and extension of PHP applications. Implementation of standard compliant web interfaces, including web service interaction.</p>
Employment	<p><b>August 2009-Current: Digital Space Corporation, Support Contract</b></p> <p>Digital Space Corporation is an international corporation focusing on the practical applications of virtual worlds for industrial design, engineering, education and public outreach. More can be seen at <a href="http://www.digitalspace.com/">http://www.digitalspace.com/</a> .</p> <p>Migrated multiple physical machines to hosting as a VPS, including investigating and selecting the VPS provider. Provide continuing maintenance for these services.</p> <p><b>2008 April-May: Strategic Data, System Administration</b></p>

	<p>Strategic Data provides services in all components of the data collection, capture, processing, management and analysis process. More can be seen at <a href="http://www.strategicdata.com.au/">http://www.strategicdata.com.au/</a> .</p> <p>Planned and implemented the upgrade of 8 servers from Debian Sarge to Debian Etch. All machines were upgraded without downtime to the organisation and their clients dependant on them. This included documented planning, testing on alternate hardware, and preparation for failure mitigation.</p> <p><b>2006-August 2009: Digital Space Corporation, Support Contract</b></p> <p>Provided remote server administration of various purpose machines, including Windows 2000 Server, Windows 2003 Server, FreeBSD and Debian Linux. This included administration of Apache web servers, MySQL databases and several mail servers.</p> <p><b>2005-2008: DM3D Studios, Lead Programmer</b></p> <p>Spear-headed, designed and implemented the Digital Spaces real-time simulation engine, with a client-driven, rapid prototyping and development methodology. This has been released as an Open Source project (LGPL) and can be seen at <a href="http://www.digitalspaces.net/">http://www.digitalspaces.net/</a> .</p> <p>I also continued with much of the role of Programmer (see below), as well as being responsible for managing others working in the role of Programmer</p> <ul style="list-style-type: none"><li>• C / C++ - Visual C++, STL</li><li>• Assessment and integration of external libraries</li><li>• Python</li><li>• Real-time physics-based 3D simulation</li></ul> <p><b>2002-2005: DM3D Studios, Programmer</b></p> <p>Performed a wide range of technology related functions, with a primary focus on simulation development, technology assessment, and web application development.</p> <p>I acted as the primary I.T. support for the office computer systems and network.</p>
Education	<p><b>2000: East Gippsland Institute of TAFE</b> Certificate IV in Information Technology - Programming</p> <p><b>1998: McKillop Catholic Regional College</b> Completed Victorian Certificate of Education</p>
Referees	<p><b>Bruce Damer: Digital Space Corporation</b> Email: <a href="mailto:bdamer@digitalspace.com">bdamer@digitalspace.com</a> Phone: +18313389400 Address: Santa Cruz, California, United States of America</p>
Interests	<p>Software design and development, artificial life simulation, genetic algorithm development, Linux server administration, virtual worlds and computer games. I also have a high degree of interest in keeping my skills current and am developing my own skills beyond my work experience. Current skill-sets I am investing in include:</p> <ul style="list-style-type: none"><li>• OpenSim and Second Life</li><li>• Virtual Networks - IPSec, IPv6</li></ul>