

Systems Administrator Systems Administrator Computer Science Graduate, University of Houston  
Houston, TX Work Experience Systems Administrator University of Houston - Houston, TX May  
2011 to Present JOB ROLES: Installing, configuring and maintaining Windows Desktops, Servers  
and Active Directory for both physical and virtual machines using Hyper-V. Setting up and  
maintaining Domain Controllers, DHCP and DNS servers Education Masters in Computer Science  
University of Houston - Houston, TX December 2012 Bachelors of Engineering in Information  
Technology University of Pune - Pune, Maharashtra July 2010 Diploma in Computer Engineering  
Maharashtra State Board of Technical Education - Mumbai, Maharashtra 2007 Skills Languages: C,  
C++, Core Java, Linux Shell Scripting. Parallel Computing: Open MPI, OpenMP, OpenCL. Operating  
Systems: Linux, Windows 7, Windows Server 08 R2. Tools: Hyper-V, VirtualBox, Symantec Ghost,  
WireShark, Kdevelop, Eclipse. Mobile Computing: Android SDK, Web Services, JSON, XML  
Additional Information ACADEMIC PROJECTS: Masters Masters Thesis: Influence of Runtime  
Parameters on the Performance of Parallel Applications (C, Open MPI, Shell Scripting) Developed  
a methodology to combine multiple Open MPI MCA parameter sets and came up with a two-stage  
parameter tuning process. Examples of such parameters include network parameters which affect  
the performance of point-to-point operations or parameters influencing the algorithms used for  
collective communication operations. Parallel DNA Sequence Alignment using OpenCL (C,  
OpenCL, Shell Scripting) Developed a parallelized version of DNA sequence alignment  
(Smith-Waterman) algorithm and tested the performance with AMD Opteron Barcelona Processors  
and NVIDIA GPUs respectively. The parallelized algorithm performed around 75% faster compared  
to its single thread counterpart. Simple Proxy Server (C, Linux) This was a proxy server which  
relayed requests between a browser and websites. The application was also able to block and  
unblock particular websites and display statistics about various hosts connected to it. Prototype of  
an Internet Router (C, Linux) Developed a basic Internet router which could route real network  
traffic, with the help of Virtual Network System (VNS) of Stanford University. A VNS server  
simulates a network topology consisting of multiple links and VNS clients. The router is an example  
of a VNS client which could route traffic to application servers in the VNS network by connecting to

the VNS server.      Prototype of a shell (C, Linux)      Developed a shell emulator which accepted commands from the user and made necessary system calls to execute them.      It supported pipes, I/O redirection and other valid combinations.      Remote Access Vectorization (Fortran, Linux)      The project involved carefully understanding the internals of the OpenUH compiler and Co-Array Fortran (CAF). Was      involved in coming up with an algorithm to vectorize remote data access requests using Co-Array Fortran for the      OpenUH compiler and developing a program to demonstrate the advantages of vectorizing data access using CAF.      ACADEMIC PROJECT: Bachelors      Adaptive Compcache - In Memory Compressed Swapping (C, Linux, Shell Scripting)      A RAM based block device which acted as a swap disk was created. Instead of swapping unused pages to the disk they were compressed and stored in this block device. Storing them in memory reduced the time taken to swap pages to the      disk. The objective to make this block device adaptive i.e. change its size at runtime based on the system performance      was achieved.      FREELANCING PROJECT:      Android App: TechShuttle (Java, Web Services, SQL Server)      Developed an App for the Android platform, which allows employees of an organization to check schedules and book      shuttles between office branches.

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