Example of HPC Engineer Job Description

Our innovative and growing company is looking to fill the role of HPC engineer. Thank you in advance for taking a look at the list of responsibilities and qualifications. We look forward to reviewing your resume.

Responsibilities for HPC engineer

- Champion best-practices, stay ahead of curve on new HPC technologies and plan code for future growth
- Provide Primary Support to High Performance Computing Site Lead
- Provide support for remote HPC systems (Debug workflow, system, and application issues, Optimize HPC user job performance, Develop scripts and procedures for system, job, and process monitoring, Maintain allocation reporting infrastructure, Automate generation of charts of system metrics, Contribute to development of system test infrastructure, Develop test cases based on use scenarios and user requirements)
- Tiered User Support (Respond to moderately complex customer inquiries (Tier-2), Assist customers in resolving technical problems by providing guidance regarding software and hardware problems, Identify, evaluate, and prioritize customer problems to ensure that inquiries are resolved appropriately, write/update/enhance system documentation concerning problem resolutions and HPC assets)
- Act as primary point of contact for all licensing, installation and HPC use queries across the Americas
- Day-to-day system administration of several Linux based HPC systems
- Develop system tools for automation and monitoring
- Proactively monitor, analyze and correct system issues
- Architect and design HPC systems to meet requirements
- Diagnosis and troubleshoot complex large scale system issues

- Expert systems
- Design and implement "HPC appliances" to lower the barrier of entry to HPC for scientists and researchers working on various fields including bioinformatics, next generation gene sequencing, drug research
- Deep understanding of parallel programming concepts and experience with tuning/optimizing parallel codes particularly in the life sciences field
- Hands on expertise architecting systems for gene sequencing, molecular dynamics, computational chemistry or similar applications
- Experience with benchmarking, performance modelling, performance extrapolations
- Domain knowledge in HPC and system software such as cluster management/provisioning tools, job schedulers, MPI, etc