Example of HPC Engineer Job Description



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Our company is searching for experienced candidates for the position of HPC engineer. To join our growing team, please review the list of responsibilities and qualifications.

Responsibilities for HPC engineer

- This position will require occasional night and weekend support
- Work with the CFSAN HPC Program Technical lead and team to manage, recommend and implement (if required) significant HPC architecture changes to support the diverse scientific disciplines within FDA
- Manage, support, install, upgrade, and configure applications, softwarepackages, and Linux OS on HPC environments
- Troubleshoot and resolve issues related to applications/software, Linux OS, Grid Engine scheduler, and wrapper scripts used in the HPC environments
- Manage and support HPC peripheral services such as Nagios, Ganglia, DNS, Repositories, XDMoD, GridFTP
- Support to the HPC users community
- Support scientific data center and operation logistics for assigned areas
- Manage, configure and support High Availability services
- Position will require a self-starter who has initiative to identify issues on their own and then develop solutions identify needed services and recommend changes including new technologies or new ways to leverage existing technologies
- Articulate customer requirements to Product Management, Marketing and R&D teams

Qualifications for HPC engineer

MS or Ph.D in CS/CE or a relevant engineering field and 10 + years

- Design and implement "HPC appliances" to lower the barrier of entry to HPC for engineers designing and manufacturing cars, aircrafts, engines
- Deep understanding of parallel programming concepts and experience with tuning/optimizing parallel codes particularly in CFD, CAE, structural analysis
- Hands on expertise architecting systems for CFD, CAE, structural analysis or similar applications
- Experience benchmarking, performance modelling and performance extrapolations particularly with ISV applications such as Ansys Fluent, Ansys Mechanical, LS-Dyna, Nastran, Abaqus, StarCD, etc
- MS or Ph.D in CS/CE/EE and 5 + years experience