

Applications Engineer

Overview:

Convey Computer Corporation designs and markets high performance servers based on a revolutionary architecture, combining the familiar world of x86 computing with hardware-based, application-specific instructions. These application specific instructions deliver many times the performance and power efficiency of a commodity processor on key algorithms in high performance computing. Convey is looking for candidates with experience in high performance programming to port and optimize applications in the bioinformatics area.

Job Description:

Successful candidates will have experience developing algorithms on highly parallel systems. Expert experience in parallel algorithm development using modern multi-threading techniques [POSIX threads, MPI, OpenMP, Intel TBB] on Linux servers is required. Experience developing high performance I/O functions for bioinformatics and life sciences data input and output is highly desirable, along with experience developing graphical or web based user interfaces.

Requirements:

- Highly fluent in C/C++ programming on Linux systems
- Experience writing multi-process//multi-threaded applications; including [but not limited to] POSIX threads, OpenMP, MPI, SHMEM, Intel TBB

Optional:

- A rich understanding of bioinformatics algorithms and methods
- Extensive experience in bioinformatics and/or life sciences applications development; especially those related to sequencing, alignment and assembly
- Experience developing new algorithmic methods for life sciences applications
- Experience porting applications to FPGA, or GPGPU accelerated servers
- Experience developing efficient I/O interfaces for various bioinformatics and/or life sciences data files
- Experience developing web-based user interfaces for common and/or custom bioinformatics applications
- Experience with Perl/Python/shell systems programming