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Recommendation for Saleh Elmohamed

Dear Colleague,

I met Saleh Elmohamed three years ago when I joined Northeast Parallel Architecture Center as a research scientist and project leader. In the intervening time I have had frequent contact with Saleh, and had the pleasure of working with him on many occasions. While not under my direct supervision, he has had numerous productive interactions with my research group—often contributing to group meetings, helping directly with development of interfaces, installations and demonstrations of our software, and guiding younger members of the group in various projects.

The activities of our group are focussed on development of libraries, compilers, and other system software for parallel computing. In the past two years we have emphasized support for parallel and distributed computing in Java. Saleh has put together interesting and useful Java applications and applets, and helped to parallelize them using our *HPJava* software. These demonstrations have been run on clusters of NT workstations and on a networks of Sun stations using SunHPC software for underlying communications. The demos formed an important part of presentions by our group at the 1997 and 1998 Supercomputing conferences in San Jose and Orlando. The software is now part of our software repository and will be included in the example suite of forthcoming *mpiJava* releases.

Saleh was also involved in design of the virtual programming lab (VPL) used as part of the distance education work of NPAC. This is an environment that makes parallel processing on our computing systems available to schools and government organizations. Remote users exploit VPL to run MPI jobs (for example) written in C, Fortran or Java. Saleh extended the functionality of VPL and made it into a robust and user-friendly package, which, again, we have used to run HPJava demos

at conferences.

Saleh continues to work with our research group, helping to enhance our HPJava software and adding useful parallel applications and demonstrations. He has also been working on algorithms and heuristics for physical optimization problems such as resource allocation and scheduling, and looking at shared memory and message-passing programming models for parallel and distributed computing in general.

My experience leads me to believe that Saleh would soon become a highly valued colleague in any organization involved in development of computer software or hardware, especially for distributed or parallel systems. I can highly recommend him for his considerable technical abilities, his constant enthusiasm, and his professional and personal good nature.

Yours sincerely,

Bryan Carpenter