

"EVERY NEW MACHINE IS A FRESH
CHALLENGE. OUR NEW SIERRA SYSTEM
INCLUDES GPGPUs FOR ANOTHER
DIMENSION OF COMPLEXITY. THERE ARE
ALWAYS TOUGH PROBLEMS TO SOLVE."

I was a world-ranked tennis pro, #1326 in the world. I've since retired my rackets and enjoy being the father of a happy-go-lucky son.

SCALING THE SUPERCOMPUTER

My job in the Development Environment Group of Livermore Computing is to assist scientists running simulations on LLNL's supercomputers. I help them get accurate, efficient results.

This means coming alongside developers and users—reworking code, supporting third-party tools, developing new tools, whatever it takes to maximize productivity and ensure good science in support of the Lab's mission.

My specialties are debuggers, Python, compilers, and math libraries. I am the primary developer of the Stack Trace Analysis Tool, an R&D100 award winner. Much like parallel applications, debugging tools for high-performance computing systems must grapple with scalability issues. This requires a scalable infrastructure and careful algorithm design.

The Development Environment Group (DEG) within Livermore Computing provides a stable, usable, leading-edge parallel application-development environment for the Lab's applications developers. DEG improves the scalable performance and reliability of LLNL applications, allowing users to focus on their science, not computer issues.

Through collaborations with vendors and third-party software developers, the DEG team supports a complete and robust software environment that meets coders' needs today and also aids them in incorporating the technologies of the future.

