Linux kernel internship

Requirements:
- Medium-advanced C/C++ programming knowledge
- Basic Linux kernel programming knowledge
- Networking knowledge (Ethernet/IP/TCP)
- Solid operating system concepts

Would be a plus:
- Assembler knowledge (GNU assembler syntax, RISC processors)
- Linux networking stack internals knowledge

Knowledge that will be obtained during the internship:
- Linux kernel architecture specifics (boot process, architecture setup, interrupt handling, device drivers, network drivers)
- Linux networking stack internals.
- Linux SMP and 64bit exposure, at the kernel level.
- Working with Virtual Machines and virtual environments

Activities during the internship:
The IxOS group is responsible with developing and maintaining the software platform (Linux based) used on our specific hardware (sh4, PowerPC, MIPS, Intel x86 32bit and 64bit).

You will be helping us with various optimizations and small enhancements, at the user and kernel level. Specific tasks may include:
- Networking multi stack scalability optimizations
- multi-core optimizations at both the generic level (network engine) as well as specific protocols,
- optimizations for Virtual Machines
- time synchronization protocols (NTP, PTP)