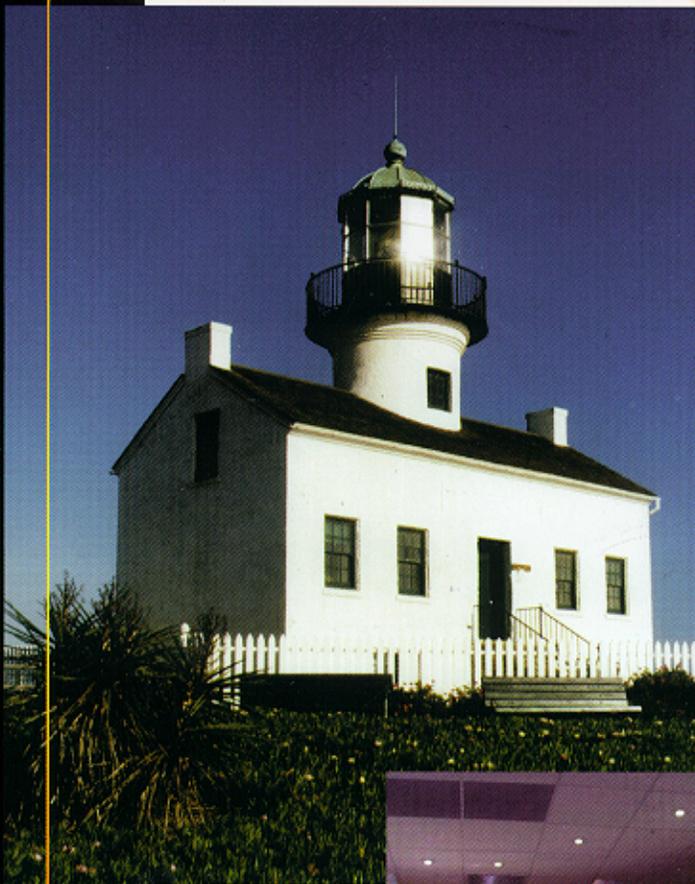


employment opportunities

new
PROFESSIONALS!



*Space and Naval
Warfare Systems
Center, San Diego*

SPAWAR



*Systems Center
San Diego*



is primarily looking for new college graduates in Computer Science, Computer Engineering, and Electronic Engineering.

The Navy's Premier Research and Development Laboratory

Welcome to the Space and Naval Warfare (SPAWAR) Systems Center, San Diego (SSC San Diego). Originally established in 1940 as the Navy's first West Coast laboratory, we've gone through various name changes over the years. You or your professors may recognize us by one of our former names, such as the Naval Electronics Laboratory Center (NELC), the Naval Undersea Center (NUC), the Naval Ocean Systems Center (NOSC), or the Naval Command, Control and Ocean Surveillance Center (NCCOSC) Research, Development, Test and Evaluation (RDT&E) Division (NRaD).

Throughout these transitions over almost 60 years, we remain the Navy's premier R&D laboratory for information technology, systems conceptualization, development, and deployment. To sustain our leadership role, we require a highly capable and motivated workforce. The future of SSC San Diego is directly linked to our ability to recruit outstanding Computer Science, Computer Engineering, and Electronic Engineering candidates for positions in our New Professionals (NP) Program. Among the opportunities we offer are careers in the innovative areas of command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR), and in all Navy navigation systems, including the Global Positioning System (GPS).

SSC San Diego's laboratories provide worldwide networking capabilities, plus the ability to participate in major joint-service exercises. Center facilities include waterfront access and berthing capabilities that are crucial to activities in ocean surveillance and reconnaissance. In addition, SSC San Diego provides a full range of in-service systems engineering, management, logistics, installation, and technical support. Besides San Diego, other Center facilities in Hawaii, Japan, and Guam provide fleet support to our customers in the mid- and Western Pacific.

Proven Performance Offers Job Stability

Although several Navy facilities have been realigned and others closed, SSC San Diego has gained significant new facilities and has recently joined with our primary command, the Space and Naval Warfare Systems Command, formerly headquartered in Washington, DC.

McLEAN LABORATORY, SSC SAN DIEGO, BAYSIDE



working at *ssc san diego*

At SSC San Diego, you'll be working on the beautiful Point Loma peninsula, an ecological wildlife and botanical reserve encompassing natural habitats that have been ensured protection by the U.S. Navy. Located approximately 7 miles from downtown, SSC San Diego occupies more than 500 acres. To the west, the Center overlooks the Pacific Ocean; immediately to the south, Mexico; and to the east, beautiful San Diego Bay, the skyline of San Diego, and the Laguna Mountains, sloping to the Anza-Borrego Desert National Park. In this natural setting, SSC San Diego offers a campus-like atmosphere, where you'll work with your peers and with senior scientists and engineers, who, as mentors, will help you advance professionally in your area of expertise.

For employees with young families, SSC San Diego also offers an on-site child-care center managed by La Petite Academy. Features of the child-care center include a professional staff, modern facilities, excellent care, and competitive prices. Infants are accepted at 6 weeks of age.

SSC SAN DIEGO AND SAN DIEGO BAY



CHILD CARE CENTER

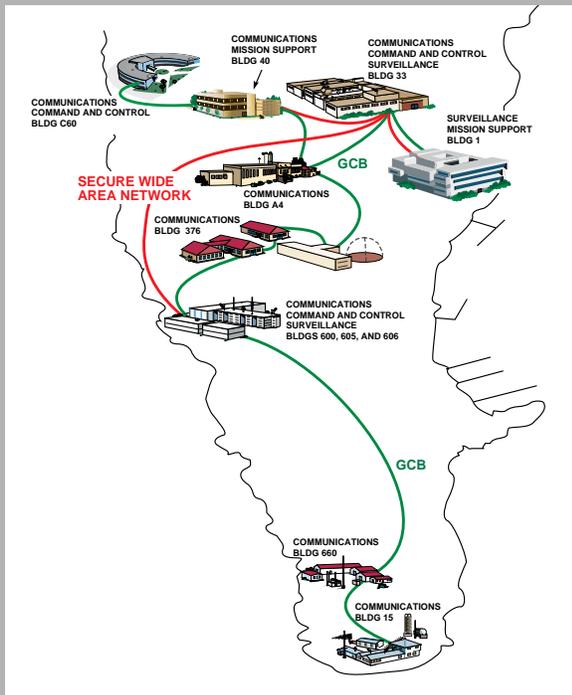




new **professionals** *program*

As a recent graduate in Science and Engineering, you may begin your career at SSC San Diego through the New Professionals Program. Your tour as a New Professional may involve working in several groups on technical projects related to your background and interests. This initial period will provide you the opportunity to experience various types of work and to get to know SSC San Diego. You'll enter a training program leading to permanent assignment in one of the following areas of major effort:

- ▼ Command, control, and communications systems
- ▼ Command, control, and communications systems countermeasures
- ▼ Command, control, and communications modeling and analysis
- ▼ Ocean surveillance systems
- ▼ Ocean engineering
- ▼ Integration of space communications and surveillance systems
- ▼ Navigation development and support
- ▼ Marine mammals
- ▼ Marine environmental quality assessment and remediation



network- linked laboratories

SSC San Diego's extensive state-of-the-art command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) test laboratories are networked together to ensure operational compatibility of new equipment with existing C4ISR systems. These laboratories, with over 30 associated testbeds, enable scientists and engineers to perform component- and systems-level testing that includes:

- ▼ Specific testing to support systems software
- ▼ In-service support to retest software/hardware interfaces
- ▼ Detailed and general tests of throughput
- ▼ Compatibility testing at all levels, including protocol testing
- ▼ Simulation of actual operational environments
- ▼ Testbeds that "talk" to each other
- ▼ Satellite communications on-air testing
- ▼ Complete real, simulated, and replicated all-environment testing of Global Positioning System (GPS) user equipment
- ▼ Full-spectrum live, simulated, and replicated all-environment testing of C4ISR systems
- ▼ Testbeds that simulate a complete joint-services theater of operations or battle space



supercomputers

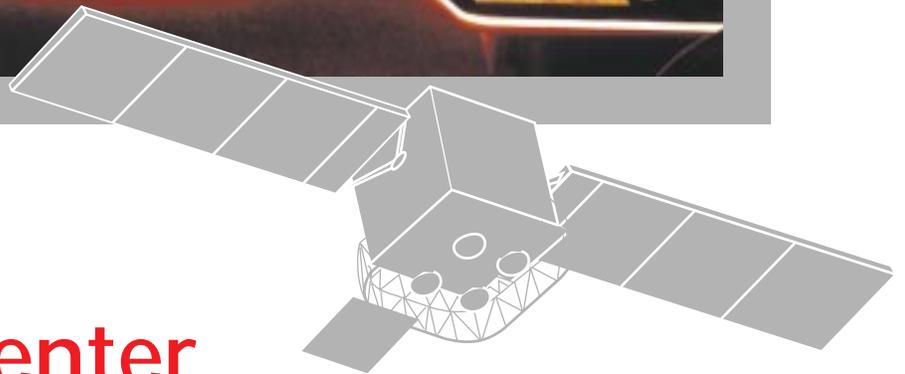
To aid in developing and testing computer software and systems, the Center's R&D inventory includes such high-performance computing (HPC) systems as the Convex Exemplar SPP-1600, the Intel Paragon XP/S-25, and high-bandwidth asynchronous transfer mode (ATM) networks.

The Exemplar is used in SSC San Diego's Command and Control HPC Research Facility. This distributed research center was created to investigate the use of high-performance systems in command and control (C2) applications, enabling scientists and engineers to investigate the integration of parallel-processing machines in existing C2 systems.

The Intel Paragon XP/S-25 is the key system in SSC San Diego's Real-Time Embedded HPC facility. One of the SSC San Diego HPC products is a Center-developed Scalable Programming Environment (SPE) that can quickly build and modify scalable systems. The SPE is primarily a function decomposition and data-flow parallelizer developed for signal-processing applications run in real-time HPC embedded systems.

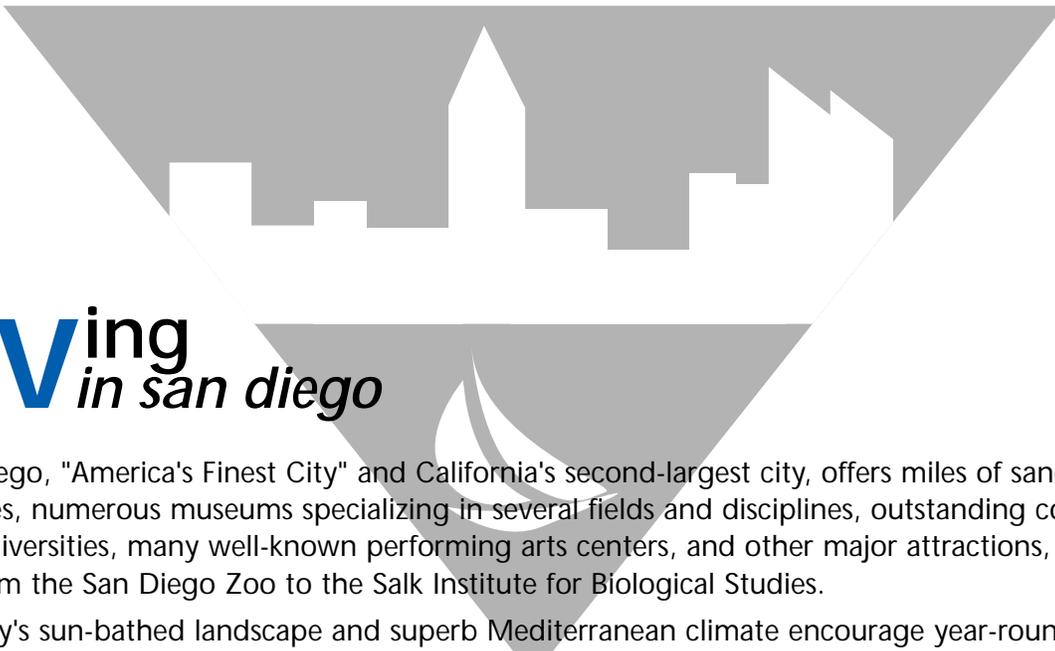
SSC San Diego is linked in real time to supercomputer centers throughout the United States, including major DoD centers at Vicksburg, MS; Stennis Space Center, MS; Wright-Patterson Air Force Base, OH; Aberdeen Proving Ground, MD; to a dozen other Distributed DoD HPC Centers; and to the San Diego Supercomputer Center.





ssc san diego's **center** command *of the future*

SSC San Diego designed, developed, and implemented the Command Center of the Future to realistically depict technologies expected to be part of command and control within the next 10 to 15 years. Although some of these technologies may not currently be available, the Command Center of the Future presents a vision of how the Navy will use these advanced technologies in command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) systems of the future. This unique capability enables warfighters to understand how technological advances will improve their ability to perform future missions and allows technologists to foresee how their designs could be employed in future command centers. Some of the technologies evaluated include digital recognition; gesture recognition; intelligent agents; personal digital assistants; 3-D volumetric displays; large-screen, flat-panel displays; natural human-computer interfaces; secure, global, seamless databasing; and multi-link video teleconferencing.



living *in san diego*

San Diego, "America's Finest City" and California's second-largest city, offers miles of sandy beaches, numerous museums specializing in several fields and disciplines, outstanding colleges and universities, many well-known performing arts centers, and other major attractions, ranging from the San Diego Zoo to the Salk Institute for Biological Studies.

The city's sun-bathed landscape and superb Mediterranean climate encourage year-round recreation. The ocean, bays, and islands invite swimming, fishing, diving, surfing, and sailing. And the surrounding mountains, valleys, and deserts provide a change of temperature for those who prefer a touch of the seasons. A metropolitan area, increasingly cosmopolitan, San Diego is located near small, friendly towns and the Mexican border.



CORONADO



SAN DIEGO SKYLINE

CORONADO

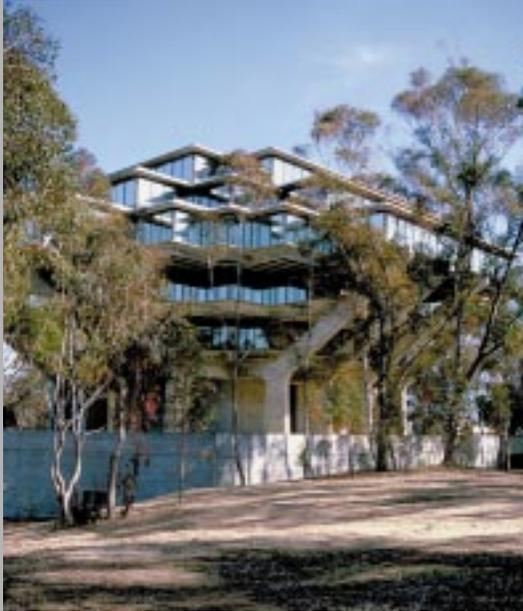


LA JOLLA COVE



san diego beaches

San Diego County's 70 miles of ocean beaches and Mexico's Baja coastline beckon visitors to exciting and unique destinations. White sand beaches, lobster dinners, and border shopping sprees are regional favorites. Afternoons of volleyball and sunset picnics by local bays, coves, and cliffs typify the San Diego lifestyle.



UNIVERSITY OF CALIFORNIA, SAN DIEGO



UNIVERSITY OF SAN DIEGO



SAN DIEGO STATE UNIVERSITY

colleges and universities

Many of San Diego's colleges and universities have been recognized both nationally and internationally for excellence in education and have received prestigious rankings in fields such as engineering, computer science, law, medicine/biomedicine, and drama. SSC San Diego itself offers world-class library services and supports the city's college and university system through employee participation in undergraduate and graduate studies (aided by our employee-assistance programs) and through the exchange of scientific information. Every summer, SSC San Diego's Academic Program brings post-doctoral fellows from around the country to work with colleagues on technical programs at SSC San Diego. Many Center employees also serve as judges at area-wide science fairs. Some of San Diego's major colleges and universities are the

- ▼ *University of California, San Diego*
- ▼ *University of San Diego*
- ▼ *San Diego State University*
- ▼ *California State University, San Marcos*
- ▼ *Point Loma Nazarene College*
- ▼ *National University*

SAN DIEGO MUSEUM OF MAN

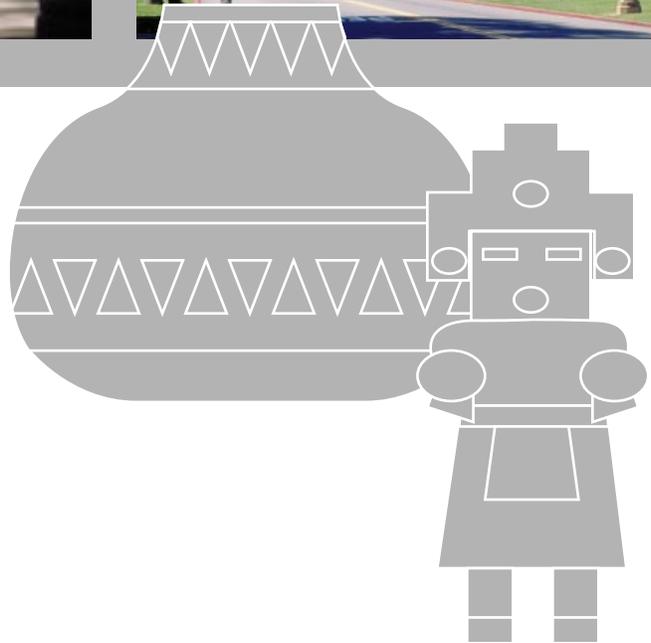


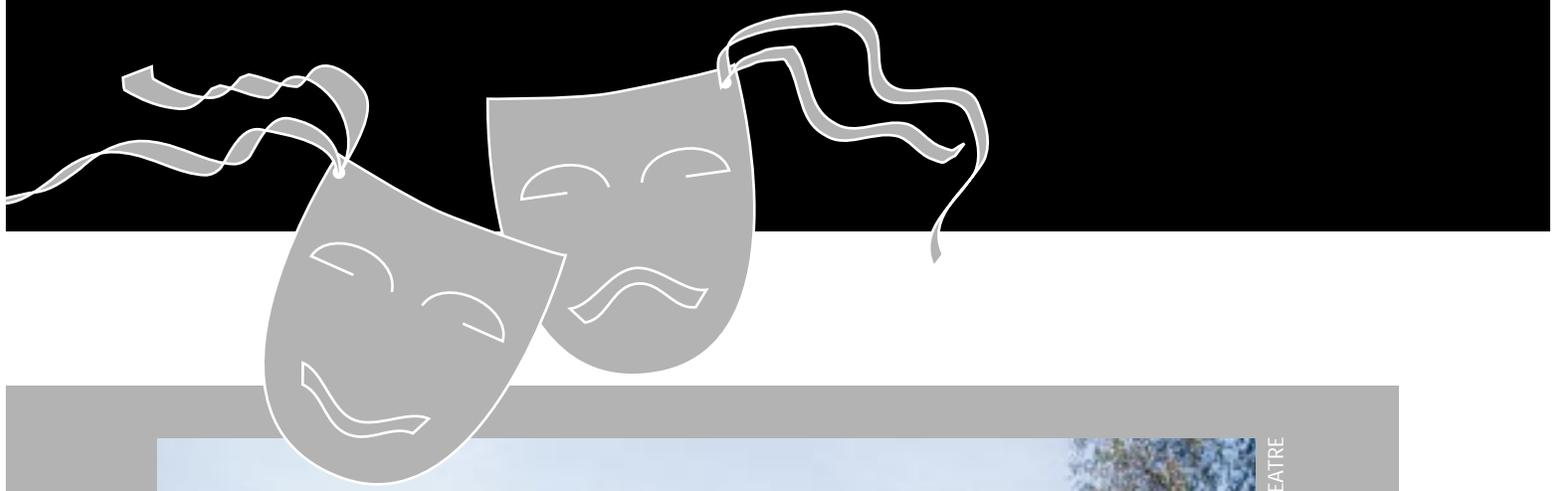
BALBOA PARK



san diego museums

Acclaimed as one of America's most livable cities, San Diego also is home to world-class history museums, specialty museums, and art galleries, with most of them located in nearby Balboa Park.





OLD GLOBE THEATRE

theatres *and* music

The world of San Diego is a stage for everyone from actors in community theatre, to summer stock, to world-famous performers in such nationally acclaimed playhouses as the Old Globe Theatre, the La Jolla Playhouse, and Escondido's California Center for the Arts. San Diego's downtown Civic Theatre and adjacent Golden Hall also play host to ballets, operas, plays, and musicals. Concerts by the bay feature rock, pop, country, and jazz artists.





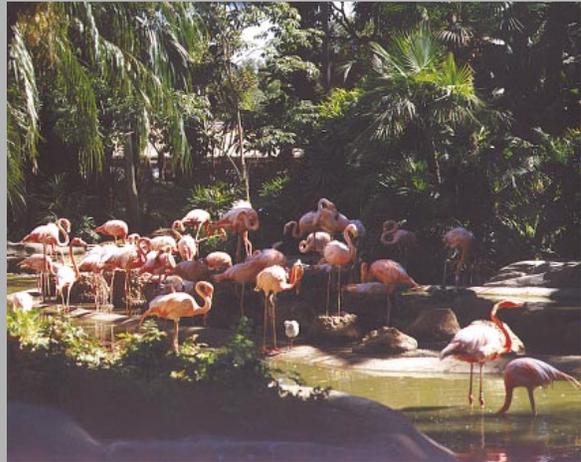
other attractions

A haven for scientists, educators, artists, sports enthusiasts, and entrepreneurs, San Diego offers an ever-increasing list of attractions. Some of the major ones include the ARCO Olympic Training Center, Balboa Park, Mission San Diego de Alcalá, Old Town, and the Salk Institute for Biological Studies. In addition, there's the world-famous San Diego Zoo and the San Diego Wild Animal Park, Scripps Institution of Oceanography, Sea World of California, and venues for all major spectator sports.

BALBOA PARK



SAN DIEGO ZOO



SEA WORLD



history of san diego

San Diego has been attracting visitors and new residents since 1542, when Cabrillo first sailed into its beautiful bay. Hidden from the view of passing ships, San Diego remained undeveloped for many years. With the arrival of Father Junipero Serra in July 1769, San Diego was officially founded. In 1821, Spain lost control of California, and Mexico ruled the land until defeated in 1846 by the U.S. In 1850, California became a state and thus began an influx of people who forever changed San Diego and all of California.

In 1927, Charles A. Lindbergh flew nonstop across the Atlantic Ocean in the *Spirit of St. Louis*, built at the Ryan Aeronautical Company in San Diego. From then on, San Diego was elevated to a position synonymous with excellence in aircraft design, development, and production; and later, in electronics, avionics, and missile systems. Most recently, San Diego has also become pre-eminent in biomedical engineering, and in the design and development of highly sophisticated software and computer systems. Today, San Diego stands as a major center for multidiscipline high-technology research, development, and manufacturing—producing commercial and military products in use throughout the world.



HOTEL DEL CORONADO



SAN DIEGO PRESIDIO

qualifications for employment

If your technological talents are superior and your ambitions are far-reaching, our New Professionals (NP) Program offers you the opportunity to join the ranks of our leading scientists and engineers.

The Space and Naval Warfare (SPAWAR) Systems Center, San Diego (SSC San Diego) is interviewing current-year graduates in science and engineering with an emphasis on Computer Science, Computer Engineering, and Electronic Engineering at the B.S./M.S./Ph.D. degree levels. A cumulative GPA of 3.0 or above (on a 4.0 scale) or equivalent is required, with excellent written and communication skills a plus. All applications will be considered.

We offer an excellent benefits package, including health and dental insurance as well as savings/investment and retirement plans.

Our primary interests are for:

Computer Engineers/Computer Scientists with experience in

- ▼ Languages: C++, C, Ada, some CMS-2
- ▼ Computer Systems: HP workstations, IBM 700 series, Sun Workstations, Pentiums, High Performance Computers (HPC) (e.g., Cray, Paragon)
- ▼ Object-Oriented Programming, Object Development, Object Brokers, etc.
- ▼ OS-UNIX, HP-RT, or distributed operating system environments
- ▼ Networking, network servers, server-client setup, LAN and WAN development and technology, etc.

Electronic Engineers with

- ▼ A strong communications course load
- ▼ A background in radio frequency (RF) engineering
- ▼ Knowledge of programming languages such as C and FORTRAN and experience with UNIX operating systems
- ▼ Systems engineering interest in building systems with Commercial-Off-The-Shelf (COTS) hardware
- ▼ Knowledge and/or interest in ocean acoustics, oceanography, sonar, and in impulsive sources/underwater explosives

We are also interested in applicants who will provide In-Service Engineering Agent (ISEA) Support, Software Support, and Installation Support for various communications and data interchange systems for the Navy, the Department of Defense, and other Federal Agencies.

- ▼ ISEA Support tasking may include
Maintenance Management, Systems Performance Evaluation, Maintenance Engineering, Maintenance Documentation Support, Configuration Management, Depot-Level Repair Support, Maintenance Support, and Technical Assistance
- ▼ Software Support tasking may include
Software Design, Development, Maintenance, Modifications, or Updates; Configuration Control; Documentation Support; Testing; and Installation Support
- ▼ Installation Support tasking may include
Installation Design; Site Preparation; Installation of Equipment/Systems; and Installation, Test, and Evaluation

For more information about the Space and Naval Warfare Systems Center, San Diego, see the SSC San Diego home page at <http://www.spawar.navy.mil/sandiego/>

Send your resumé to:
COLLEGE RECRUITMENT
OFFICE D0207
SPAWARSYSCEN
53560 HULL STREET
SAN DIEGO CA 92152-5001
Phone: (619) 553-1837
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Reviewed and approved by



A.C. Oakleaf, CAPT, USN
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