

Job Posting:161693 - Position: S25 Software Engineering Internship/Co-op 161693 E5

Co-op Work Term Posted: 2025 - Summer
App Deadline 03/11/2025 09:00 AM
Application Method: Through Employer Website
Posting Goes Live: 02/25/2025 10:56 AM
Job Posting Status: Approved

ORGANIZATION INFORMATION

Organization SpaceX
Address Line 1 1 Rocket Rd
City Hawthorne
Postal Code / Zip Code 90250
Province / State CA

JOB POSTING INFORMATION

Placement Term 2025 - Summer
** Job Title ** S25 Software Engineering Internship/Co-op 161693 E5
Position Type Co-op Position
Job Location Multiple Locations
Country USA
Duration 4 months
Salary Currency US
Salary 30.0 per hour for 0 Major List

Job Description

Job Title: Summer 2025 Software Engineering Internship/Co-op

SpaceX was founded under the belief that a future where humanity is out exploring the stars is fundamentally more exciting than one where we are not. Today SpaceX is actively developing the technologies to make this possible, with the ultimate goal of enabling human life on Mars.

SpaceX seeks extraordinary students to join us for software engineering roles in Summer 2025. As a software intern, you will work closely with your mentor and other employees who will help you apply your knowledge and grow your skills on projects that have a significant impact. You'll also get to have some fun and network with other interns and employees through optional social and professional events. If you've demonstrated a commitment to academic success and motivation to apply your knowledge outside of the classroom, you are a great candidate! Aerospace experience is not required to be successful here - rather we look for smart, motivated, collaborative engineers who love solving problems and want to make an impact on a super inspiring mission.

Internships are available with a variety of software engineering teams across the company at Bastrop, TX; Brownsville, TX; Cape Canaveral, FL; Hawthorne (Los Angeles), CA; Irvine, CA; McGregor (Waco), TX; Redmond, WA and Sunnyvale, CA.

TEAM DESCRIPTIONS:

APPLICATION SOFTWARE: The Application software team is currently creating and evolving systems to enable rapid build and reuse of Starship as well as designing the next generation manufacturing software that will be used in high throughput factories for

Starlink. Other applications range from platforms that support concurrent streams of data from many always-on assets to manage the world's largest satellite constellation to public facing systems where customers can join our Starlink network globally. We work closely with engineers throughout the company to create and update our systems with respect to crewed launches, Starship flights, changes to the Starlink network and much more.

DRAGON SOFTWARE: As a software engineering intern on the Dragon Software team, you will develop, analyze and verify the mission critical software configurations that fly our Dragon Crewed and Cargo vehicles. You will partner cross-functionally to ensure software is configured to each mission's specifications and needs. You will be responsible for ensuring the vehicle behaves as expected, and troubleshooting flight software when necessary. You will have a direct impact on our ability to launch and fly vehicles frequently, safely and reliably.

FALCON SOFTWARE: As a software engineering intern on the Falcon Software team, you will develop, analyze and verify the mission critical software that flies our Falcon and Falcon Heavy launch vehicles. You will be responsible for ensuring the vehicle behaves as expected, is adequately tested prior to launches, and troubleshoot flight software when necessary. You will have a direct impact on our ability to launch and fly vehicles frequently, safely and reliably.

GUIDANCE, NAVIGATION & CONTROL (GNC): The GNC teams at SpaceX support our Dragon, Falcon, Starlink, Starshield and Starship programs by developing highly reliable and performant GNC algorithms, simulations, tools, services, and dashboards. The ideal candidates for these teams have experience in orbital mechanics, modeling, and simulation, satellite attitude determination and control, and have a passion for advancing the commercial space industry.

PRODUCT SECURITY: The Starlink Product Security team is seeking technical, passionate engineers to secure Starlink software and hardware. We are looking for people who see the big picture, prioritize accordingly, and are comfortable with working at different levels of abstraction. Ideal candidates have notable skills in one or more of the following: exploit development or mitigation, security architecture design, firmware security, software development, or operating system security.

SILICON ENGINEERING: Designs, develops and qualifies our custom developed semiconductor solutions. The group partners with other engineering teams and industry partners to create innovative digital, analog and mixed-signal ASICs and FPGAs. This group develops a broad variety of chips in CMOS, BiCMOS, GaAs and GaN technologies, from large SoC's to mmWave RFICs. The work includes but is not limited to: system architecture, full flow IC development, RF and PCB development, custom packaging, integration & test, SW development and semiconductor qualification. As an intern, you will have the opportunity of applying your skills in ASIC design, computer architecture, Verilog/SystemVerilog, C/C++, EE/RF circuit design.

STARLINK SOFTWARE: The Starlink software team is solving challenges underpinning every aspect of SpaceX's satellite internet project, and we're looking for engineers to join us in building the next-generation networking technologies to direct data through an ever-changing network of satellites, ground stations, and users. The Starlink software team is responsible for the firmware and controls software running on custom hardware that flies the world's largest fleet of spacecraft, as well as the infrastructure and tools to enable rapid development and reliable deployment of our code to dynamic production environments.

STARSHIELD SOFTWARE: The Starshield software team is building highly reliable in-space mesh networks, designing secure systems to guarantee access to space, designing next-generation communication and sensing software, and more. Aerospace experience is not required to be successful here - we want our engineers to bring fresh, diverse ideas from all areas. The Starshield software team is involved in designing the vehicle systems at every phase of development and building software systems that are secure, reliable, and autonomous. Our software interns are responsible for the life cycle of the software they create, including development, testing, and operational support.

STARSHIP SOFTWARE: The Starship software team is responsible for building and testing the control systems, network, and operational software for Starship, the Super Heavy Booster, and our launch pads in Starbase. On this team, you will work closely with engineers across the company to prepare our vehicle for its first orbital flights and to lay the groundwork for future crewed flights and human lander programs. Ideal candidates have skills in one or more of the following areas: embedded systems, computer networking, operating systems, or web application development.

Job Requirements

BASIC QUALIFICATIONS:

- Must be enrolled in a bachelor's degree or graduate program by the start of employment
- 3+ months of software programming or development experience
- Software coding experience in one or more of the following: C, C++, C#, Java, JavaScript, Python
- **Applicant for this intern position must be a (i) U.S. citizen or national, (ii) U.S. lawful permanent resident (e.g., green card holder), (iii) Refugee under 8 U.S.C. § 1157, or (iv) Asylee under 8 U.S.C. § 1158.**

PREFERRED SKILLS AND EXPERIENCE:

- GPA of 3.5 or above
- 6+ months experience developing and deploying software that has been used on real-world applications and projects
- Strong fundamental knowledge of computer architecture and networks
- Experience with software documentation, creating system diagrams, and enumerating software requirements
- Strong skills in debugging, performance optimization and unit testing
- Strong interpersonal skills (examples: leading a student organization or working successfully in teams)
- Ability to work effectively in a dynamic environment with changing needs and requirements
- Ability to work independently and in a team, take initiative, and communicate effectively

ADDITIONAL REQUIREMENTS:

- Able to work full time, onsite for a minimum of 12 consecutive weeks beginning in May or June 2025
- Able to provide own transportation for positions at Bastrop, Brownsville, Cape Canaveral and McGregor locations

Citizenship Requirement N/A

APPLICATION INFORMATION

Application Procedure Through Employer Website

Cover Letter Required? Yes

Address Cover Letter to Hiring Manager

Special Application Instructions

Application Link:

https://boards.greenhouse.io/spacex/jobs/7623213002?gh_jid=7623213002

Indicate your interest to apply to this position in SCOPE and also submit your application package via the online website portal.

Applications are accepted on a rolling basis and the posting may expire at any time. Students should submit their applications as soon as they are ready.