

JavaScript Virtual Machine Compiler Engineer

Santa Clara Valley (Cupertino), California, United States
Software and Services

[Submit Resume](#)

[◀ Back to search results](#)

Summary

Posted: Oct 4, 2022
Weekly Hours: 40
Role Number:200431126

The WebKit JavaScript Virtual Machine is responsible for executing the JavaScript and WebAssembly code found in web pages. It uses type inference, dynamic compilation, and sophisticated compilation optimizations to turn JavaScript programs into efficient machine code on x86 and ARM64. JavaScript Virtual Machine engineers work on all aspects of the compilation pipeline, including the parser and lexical analysis, the profile-guided speculative compiler, and the optimizing compiler backend. They also own and maintain the language runtime, the garbage collector, and the JavaScriptCore API for native apps.

Key Qualifications

- Detailed knowledge of C and C++
- Excellent debugging, critical thinking, and communication skills
- Detailed understanding of data structures and algorithms
- Experience with compilers, parsers, interpreters, and garbage collectors

Description

As a JavaScript Virtual Machine Engineer you will work as a generalist in these areas, diagnosing and fixing performance, stability, standards compliance, and compatibility issues, implementing new language features, and supporting browser and non-browser JavaScript clients.

Education & Experience

BS in computer science or equivalent

Additional Requirements

- Experience with compilers, parsers, interpreters, and garbage collectors
- Experience with assembly-level programming
- Detailed knowledge of the JavaScript language
- Detailed knowledge of the WebAssembly language
- Experience with performance analysis
- Experience with open source software development

Submit Resume

< Back to search results

See all roles in Santa Clara Valley (Cupertino) >

Apple is an equal opportunity employer that is committed to inclusion and diversity. We take affirmative action to ensure equal opportunity for all applicants without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, Veteran status, or other legally protected characteristics. Learn more about your EEO rights as an applicant.

Apple will not discriminate or retaliate against applicants who inquire about, disclose, or discuss their compensation or that of other applicants. Learn more.

Apple is required to comply with a COVID-19 vaccination mandate issued by the New York City Department of Health. We will verify the vaccination status of all New York City team members who are working at an Apple Store, office, or partner store in New York City. Learn more.

Apple will consider for employment all qualified applicants with criminal histories in a manner consistent with applicable law. If you're applying for a position in San Francisco, review the guidelines applicable in your area.

Apple participates in the E-Verify program in certain locations as required by law. Learn more about the E-Verify program.

Apple is committed to working with and providing reasonable accommodation to applicants with physical and mental disabilities. Apple is a drug-free workplace. Learn more.

Careers at Apple Careers at Apple

Shop and Learn

- Store
- Mac
- iPad
- iPhone
- Watch
- AirPods
- TV & Home
- iPod touch
- AirTag
- Accessories
- Gift Cards

Services

- Apple Music
- Apple TV+
- Apple Fitness+
- Apple News+
- Apple Arcade
- iCloud
- Apple One
- Apple Card
- Apple Books
- Apple Podcasts
- App Store

Account

- Manage Your Apple ID
- Apple Store Account
- iCloud.com

Apple Store

- Find a Store
- Genius Bar
- Today at Apple
- Apple Camp
- Apple Store App
- Refurbished and Clearance
- Financing
- Apple Trade In
- Order Status
- Shopping Help

For Business

- Apple and Business
- Shop for Business
- For Education
- Apple and Education
- Shop for K-12
- Shop for College

For Healthcare

- Apple in Healthcare
- Health on Apple Watch
- Health Records on iPhone

For Government

- Shop for Government
- Shop for Veterans and Military

Apple Values

- Accessibility
- Education
- Environment
- Inclusion and Diversity
- Privacy
- Racial Equity and Justice
- Supplier Responsibility

About Apple

- Newsroom
- Apple Leadership
- Career Opportunities
- Investors
- Ethics & Compliance
- Events
- Contact Apple

More ways to shop: Find an Apple Store or other retailer near you. Or call 1-800-MY-APPLE.