Careers at Apple

Work at Apple   Life at Apple   Profile   Sign In   Search

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) ›

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.