

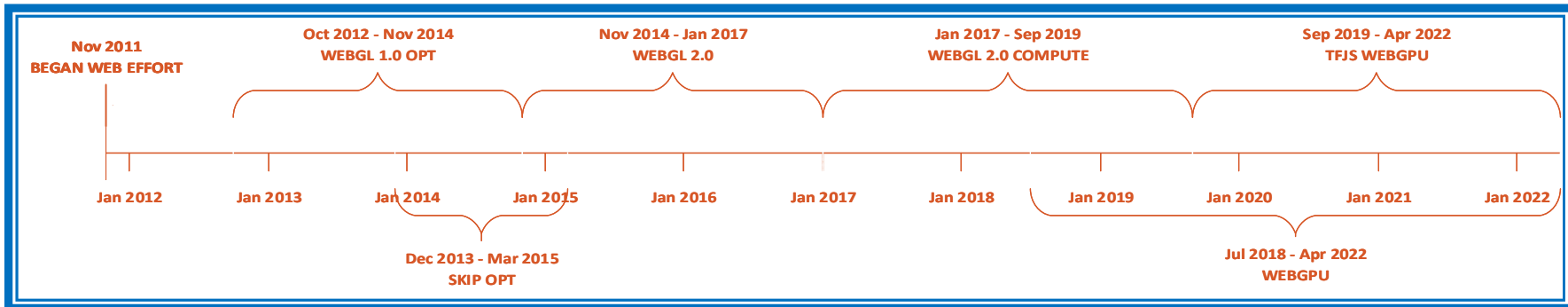
WebGL + WebGPU Meetup April 2022

Intel's Updates on Web Graphics

Yang Gu, on behalf of Intel Web Graphics Team
July 31, 2019 (SIGGRAPH 2019) - April 26, 2022 (WebGL Meetup April 2022)

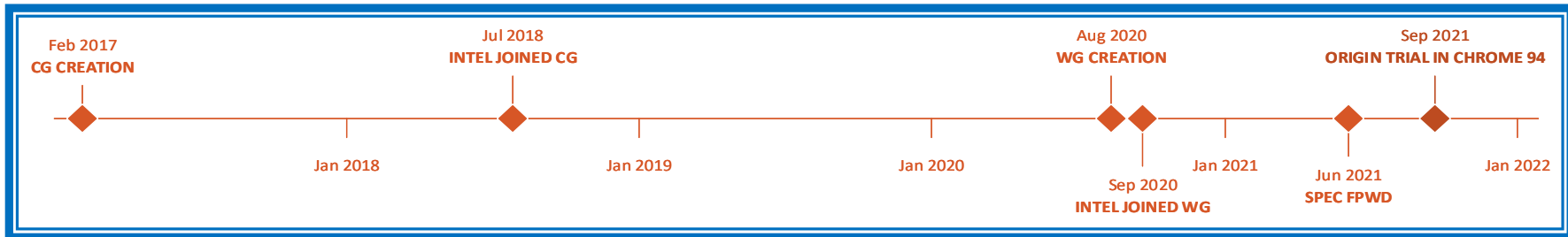


About Intel Web Graphics Team



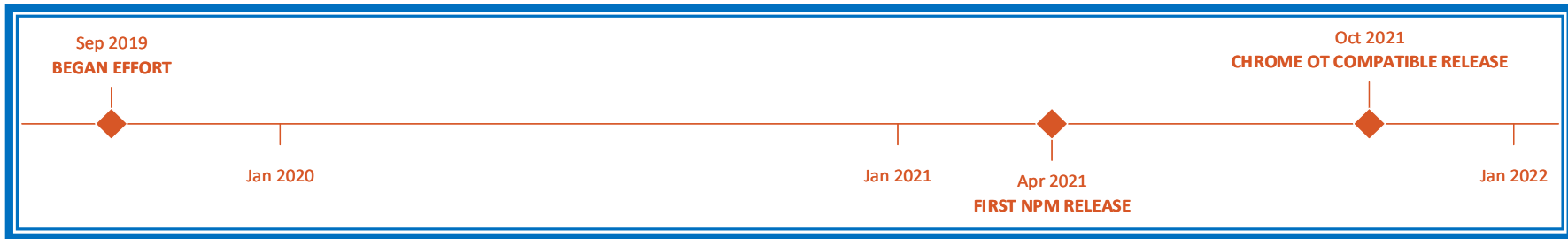
- Started the effort on the web in Nov 2011
- Mainly focus on WebGPU and TensorFlow.js WebGPU backend now
- Intel rep of Khronos WebGL Working Group and W3C WebGPU Working Group
- 3500+ patches in Web Graphics specs, CTS (Conformance Test Suite), Chromium and relevant projects (ANGLE, Dawn, etc.)

WebGPU



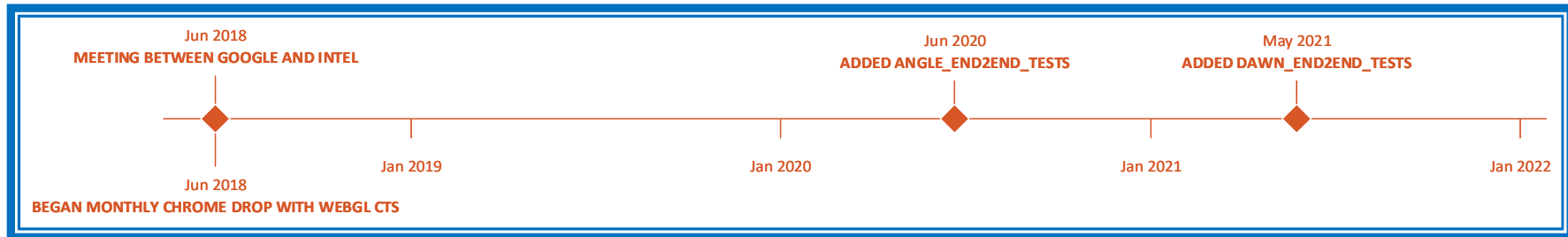
- Started the effort in Jul 2018
- Contribute a lot to spec, CTS and browser implementation
- Work closely with the community, Google and Microsoft
- Work closely with internal teams on conformance/performance issues and future hardware roadmap

TensorFlow.js WebGPU Backend

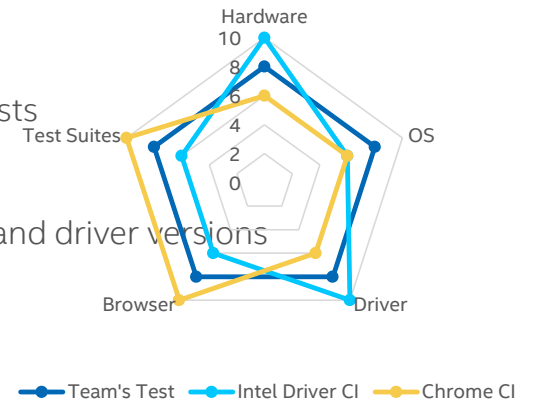


- Started the effort in Sep 2019
- Mainly focus on model support and performance tuning
 - 101/165 ops are supported
 - Better performance than WebGL backend with middle or large sized models
 - Bring feature requests to WebGPU

Conformance on Intel Platforms



- Intel driver CI (hardware, driver)
 - Daily on 10+ platforms, including pre-production ones
 - Monthly update with Chromium, WebGL CTS, ANGLE end2end tests, Dawn end2end tests
- Chrome CI (browser, test suites)
 - Mature Chrome, including test framework, to better understand Intel GPU generations and driver versions
 - Owner of Intel specific graphics issues in Chrome, add regression test cases
- Team's test
 - Daily on 2 machines, one for Windows and one for Linux
 - On demand tests against latest hardware



Web Graphics in China

- China has a very large population of Web Graphics developers, with an even larger potential to grow
- Let's build a better ecosystem, together with the worldwide efforts
- Contact us (yang.gu@intel.com) for further collaboration

Yang Gu's Wechat

