



# OPENWEST

TypeScript



# TypeScript and AngularJS

Tony Curtis  
Joe Skeen

TypeScript



# Bios

## Tony Curtis

Consultant Software Engineer /  
Supervisor at Intermountain  
Healthcare

Passionate about unit testing, code  
craft, euro-games, writing, Sci-Fi,  
music, Monty Python's Flying Circus.



## Joe Skeen

Passionate developer and evangelist  
Experience in TypeScript, JavaScript,  
C#, Java, PHP, Object Pascal, and  
dabbled in some others



TypeScript

 ANGULARJS  
by Google

# What is TypeScript?

A superset of JavaScript that compiles down to plain JavaScript.

TypeScript adds optional static typing and features from the future (ES6+).

# Why TypeScript?

Managing Large JS Projects is Hard

**Sometimes  
JS projects  
start small...**

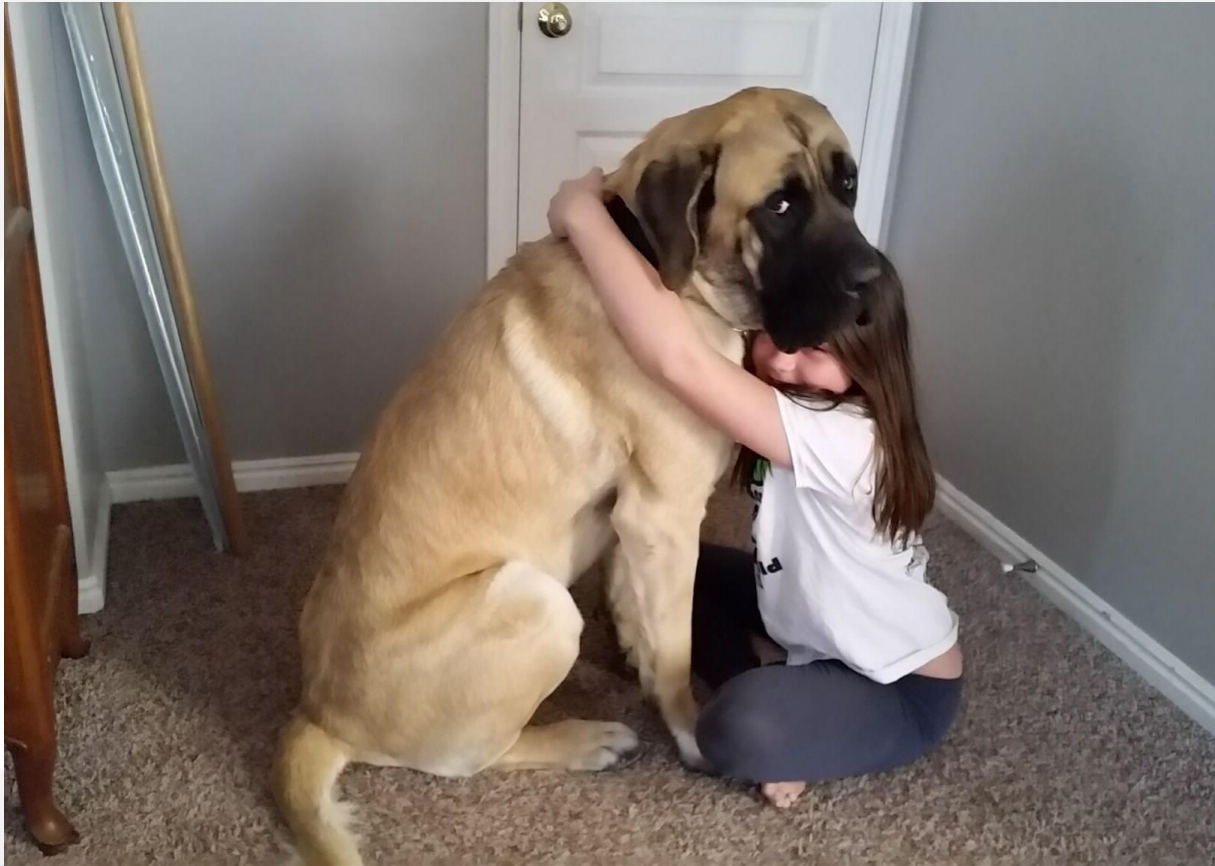


TypeScript

 ANGULARJS  
by Google

# Why TypeScript?

Managing Large JS Projects is Hard



**... but grow  
larger than  
you expect!**

TypeScript

 **ANGULARJS**  
by Google

# Why TypeScript?

## Low Barrier to Entry

### JavaScript

```
function sortByNames(a) {  
  var result = a.slice(0);  
  result.sort(function (x,y) {  
    return x.name.localeCompare(y.name);  
  });  
  return result;  
}
```

### TypeScript

```
function sortByNames(a) {  
  var result = a.slice(0);  
  result.sort(function (x,y) {  
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  });  
  return result;  
}
```

# Why TypeScript?

## Use Future JS Features Today

Compiles ECMAScript 6 code to  
ECMAScript 3 or 5 code using  
CommonJS or AMD modules

- Modules
- Classes
- Arrow functions
- Default parameters
- Destructuring
- Spread and rest
- Let and const
- for...of
- Object literal methods
- Shorthand properties
- Computed properties
- Octal / binary literals
- Symbols
- Template strings

TypeScript





# Why TypeScript?

Static Types → Better Tooling

- Intelligent autocompletion
- Refactoring Support
  - Renaming
- Code analysis
  - Navigation
  - Find All References

[Example on Playground](#)

TypeScript



# Why TypeScript?

Great Tooling Support



Brackets



TypeScript



# Why TypeScript?

## Industry Use



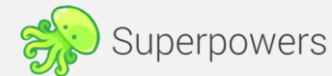
Microsoft



asana:



WIX.com



TypeScript



# Why TypeScript?

## Industry Use

AtScript  
is  
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TypeScript



# Why TypeScript?

## Industry Use



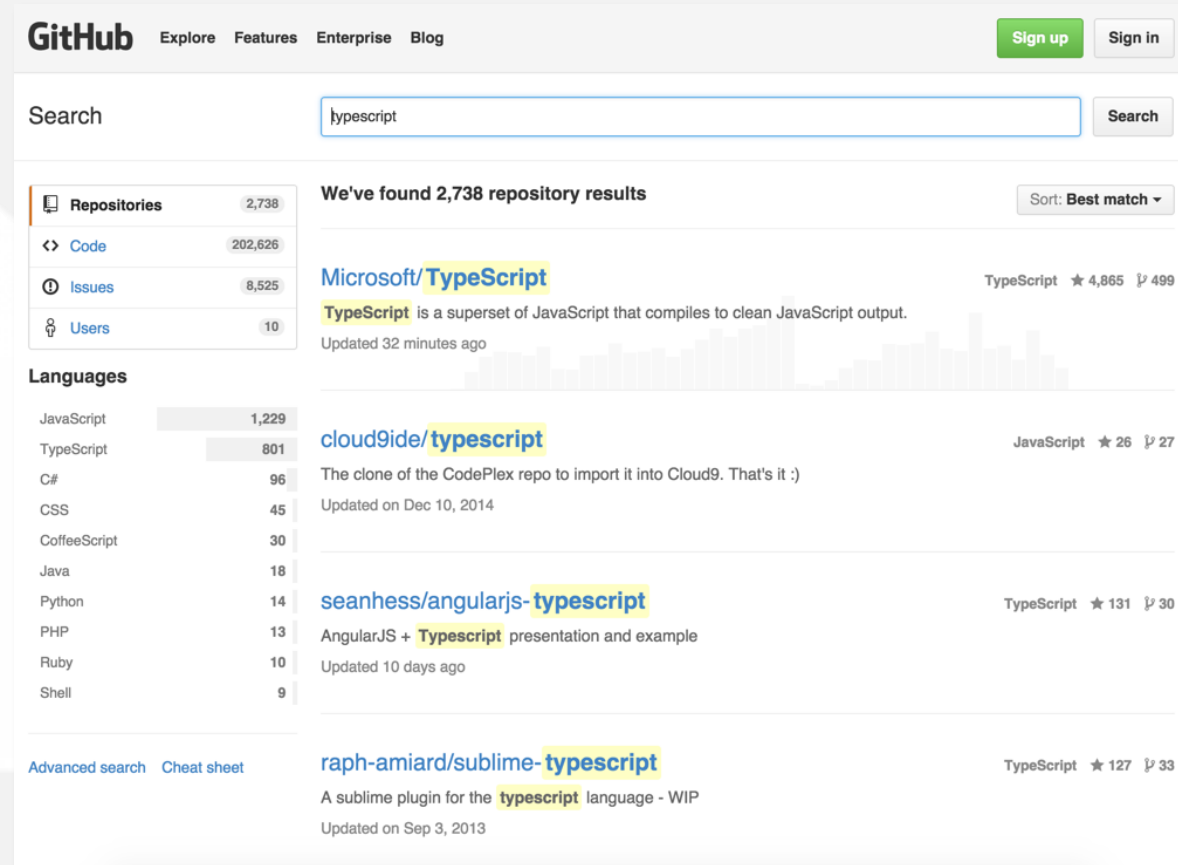
<http://channel9.msdn.com/Events/Build/2015/3-644>

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# Why TypeScript?

## Open Source



The screenshot shows the GitHub search interface with 'typescript' entered in the search bar. The results page displays a sidebar with filters for Repositories (2,738), Code (202,626), Issues (8,525), and Users (10). Below this is a 'Languages' section with a bar chart showing the distribution of languages in the repositories, with JavaScript being the most common (1,229) and TypeScript second (801). The main content area lists repository results, starting with 'Microsoft/TypeScript' which has 4,865 stars and 499 forks. The description for this repository states that TypeScript is a superset of JavaScript that compiles to clean JavaScript output. Other results include 'cloud9ide/typescript', 'seanhess/angularjs-typescript', and 'raph-amiard/sublime-typescript'.

**GitHub** Explore Features Enterprise Blog [Sign up](#) [Sign in](#)

Search  [Search](#)

**Repos** **Repositories** 2,738  
Code 202,626  
Issues 8,525  
Users 10

**Languages**

Language	Count
JavaScript	1,229
TypeScript	801
C#	96
CSS	45
CoffeeScript	30
Java	18
Python	14
PHP	13
Ruby	10
Shell	9

[Advanced search](#) [Cheat sheet](#)

**We've found 2,738 repository results** Sort: **Best match**

**Microsoft/TypeScript** TypeScript ★ 4,865 🍴 499  
TypeScript is a superset of JavaScript that compiles to clean JavaScript output.  
Updated 32 minutes ago

**cloud9ide/typescript** JavaScript ★ 26 🍴 27  
The clone of the CodePlex repo to import it into Cloud9. That's it :)  
Updated on Dec 10, 2014

**seanhess/angularjs-typescript** TypeScript ★ 131 🍴 30  
AngularJS + Typescript presentation and example  
Updated 10 days ago

**raph-amiard/sublime-typescript** TypeScript ★ 127 🍴 33  
A sublime plugin for the typescript language - WIP  
Updated on Sep 3, 2013

TypeScript



# Why TypeScript?

Open Source

Definitely Typed: over 1000 community-contributed declaration files describing the API of popular JS libraries



Sencha Ext JS

Jasmine

...and hundreds more

TypeScript





# DEMO

TypeScript





# How to Get Started with TypeScript

<http://www.TypeScriptLang.org>

```
npm install -g typescript
```

<http://definitelytyped.org/>

# QUESTIONS

TypeScript

