



Typescript

Pra que serve? Onde Vive? Do que se alimenta?



Um pouco sobre mim

```
const {  
  javascript,  
  naruteiro,  
  orderManager,  
  restaurant,  
  typescriptEnthusiast  
} = iFood[LUIS_TAKAHASHI];
```

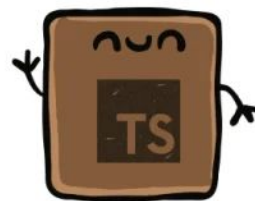
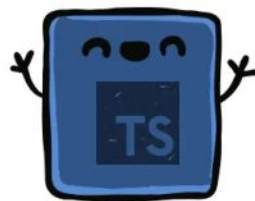
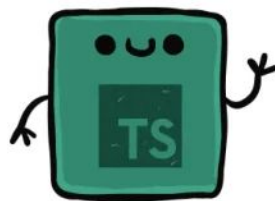
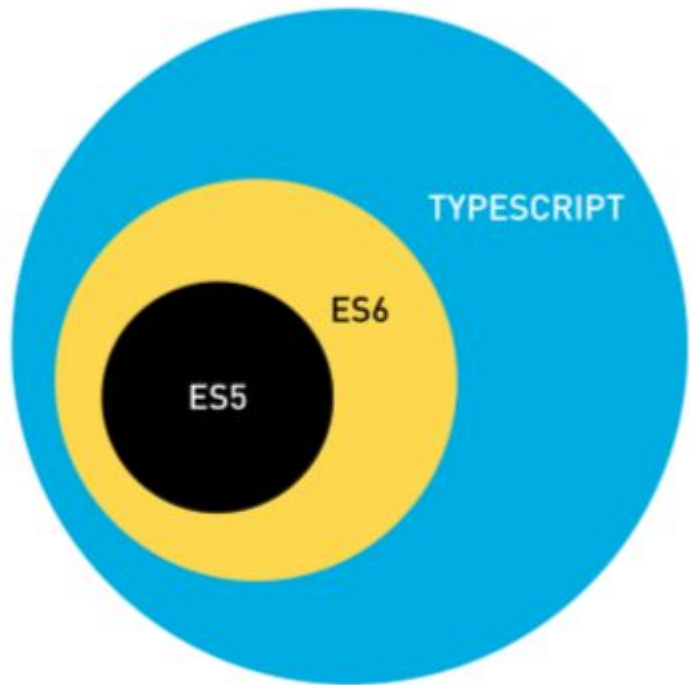


Objetivo

Apresentar o que é Typescript, vantagens, desvantagens, e exemplos



O que é?





Vantagens





- Tipagem estática **opcional**
- Acesso à features ES(x), antes de serem suportadas pela maioria dos browsers
- Código auto-explicativo e documentado
 - Facilidade na comunicação e compartilhamento de regras de negócio



- Grande aderência da comunidade
 - Employer Branding
- Refactors
- Diminuição de testes redundante
- Melhor experiências com IDE's
 - Sugestões
 - Inferência de tipos
- Próprio compilador



Desvantagens





- Suporte de Libs
- Verbosidade x Tempo de desenvolvimento
- Curva de aprendizagem
 - OOP
 - Setup inicial
 - Tipagens
 - Lints
 - Novas features e sintaxes
 - enums, interfaces, decorators, optional params, etc.

Desvantagens



Comunidade e Cases





case
@CaseSandberg

"This May shock 54% of you" @seldo #reactathon

Traduzir Tweet



Fonte: <https://twitter.com/CaseSandberg/status/1038626258362327041>

Adoção da comunidade - npm



Most Loved, Dreaded, and Wanted

Most Loved, Dreaded, and Wanted Languages

Loved Dreaded Wanted



2017



Most Loved, Dreaded, and Wanted

Most Loved, Dreaded, and Wanted Languages

Loved Dreaded Wanted



2018



Most Loved, Dreaded, and Wanted

Most Loved, Dreaded, and Wanted Languages

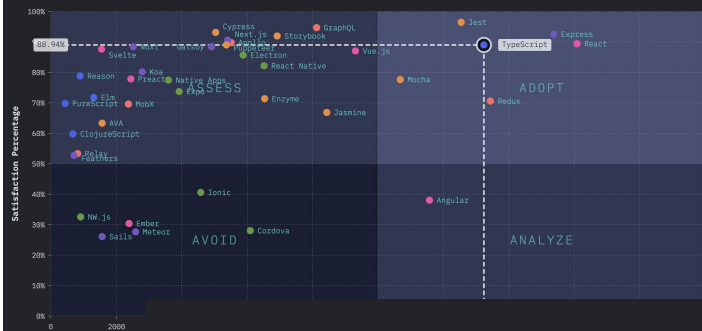
Loved Dreaded Wanted



2019



- **ASSESS:** Low usage, high satisfaction. Technologies worth keeping an eye on.
- **ADOPT:** High usage, high satisfaction. Safe technologies to adopt.
- **AVOID:** Low usage, low satisfaction. Technologies probably best avoided currently.
- **ANALYZE:** High usage, low satisfaction. Reassess these technologies if you're currently using them.



Rankings

Export

Share

JavaScript Flavors

Each line goes from 2016 to 2019. A higher point means a technology has been used by more people, and a point further to the right means more users want to learn it; or have used it and would use it again.

NEGATIVE OPINIONS

HAVE USED

TypeScript

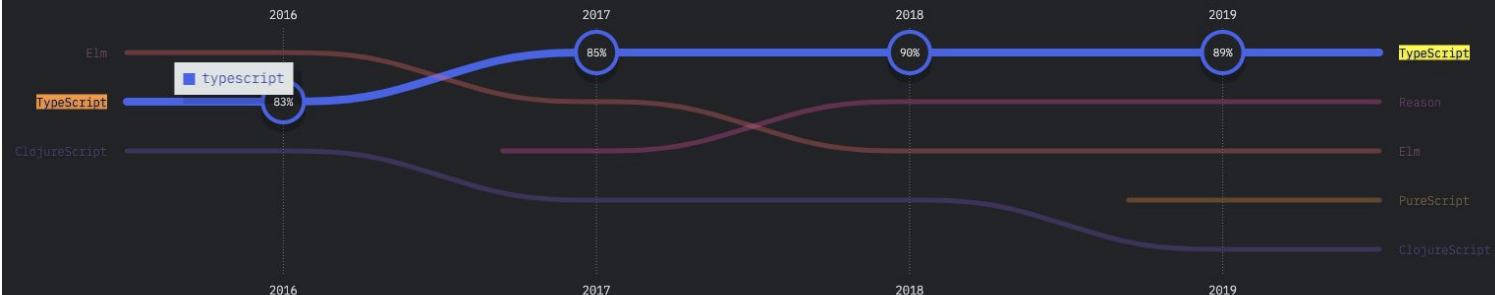
2019

Satisfaction

Interest

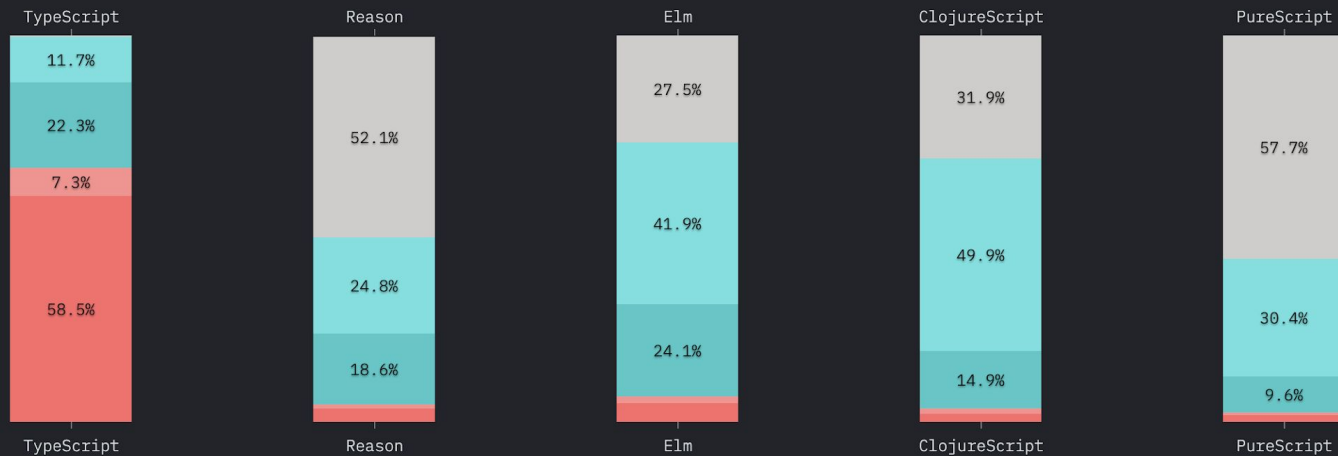
Awareness

Awareness, interest, and satisfaction ratio rankings.

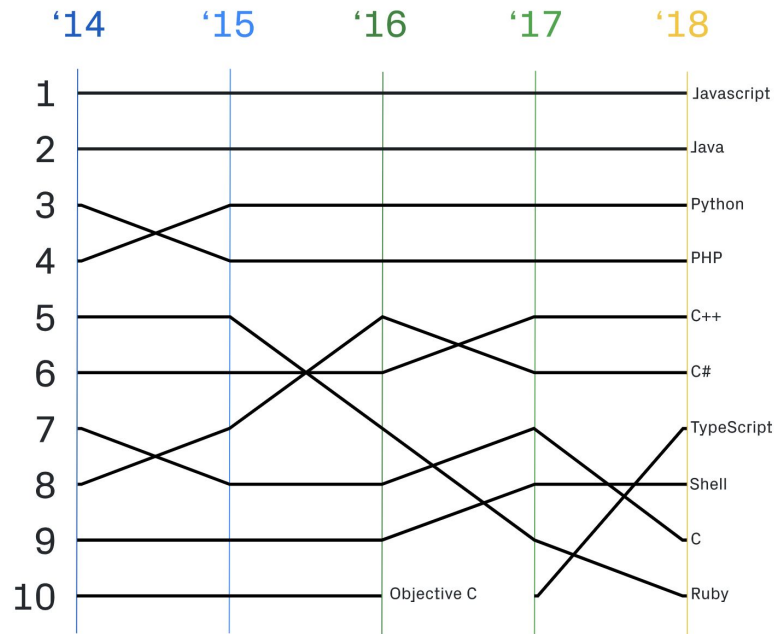




Overview of opinions on the technologies surveyed. Darker segments represent positive opinions, while lighter segments correspond to negative sentiment.



■ I've USED it before, and WOULD use it again ■ I've USED it before, and would NOT use it again ■ I've HEARD of it, and WOULD like to learn it ■ I've HEARD of it, and am NOT interested ■ I've never heard of it



Top languages over time

1	Kotlin	2.6x
2	HCL	2.2x
3	TypeScript	1.9x
4	PowerShell	1.7x
5	Rust	1.7x
6	CMake	1.6x
7	Go	1.5x
8	Python	1.5x
9	Groovy	1.4x
10	SQLPL	1.4x

Fastest growing languages



Top open source projects

VS Code, React, and Tensorflow once again top our list of open source projects by contributor count. New to the list are projects that manage containerized applications, share Azure documentation, and consolidate **TypeScript** type definitions: Kubernetes, Azure Docs, and DefinitelyTyped. *

	Contributors
1 <u>Microsoft/vscode</u>	19κ
2 <u>facebook/react-native</u>	10κ
3 <u>tensorflow/tensorflow</u>	9.3κ
4 <u>angular/angular-cli</u>	8.8κ
5 <u>MicrosoftDocs/azure-docs</u>	7.8κ
6 <u>angular/angular</u>	7.6κ
7 <u>ansible/ansible</u>	7.5κ
8 <u>kubernetes/kubernetes</u>	6.5κ
9 <u>npm/npm</u>	6.1κ
10 <u>DefinitelyTyped/DefinitelyTyped</u>	6.0κ

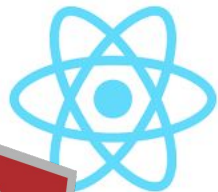
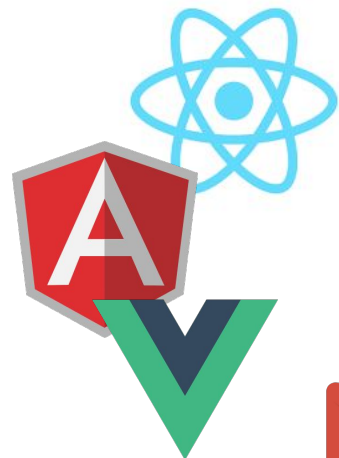


38% of bugs at Airbnb could have been prevented by TypeScript according to postmortem analysis





Create React App



Formik



Gmail



GitHub



circleci



reddit

Fonte: <https://stackshare.io/typescript>

Players e cases



Exemplos





```
class Ap [ts]
  0 refere Type '{ children: string; }' is not assignable to type 'In
  privat trinsicAttributes & IntrinsicClassAttributes<Button> & Rea
  cons donly<{ children?: ReactNode; }> & Re... '.
  } Type '{ children: string; }' is not assignable to type
  4 refere 'ReadOnly<Props>'.
  render Property 'onClick' is missing in type '{ children: str
  retu ing; }'.
  <div class Button
  <Button>Click me!</Button>
  </div>
  )
}
```



```
type Props = {  
  onClick(e: MouseEvent<HTMLElement>): void  
} & Partial<DefaultProps>
```

2 references

```
type DefaultProps = {  
  color: 'blue' | 'green' | 'red'  
  type: 'button' | 'submit'  
}
```

2 references

```
class Button extends Component<Props> {
```

0 references

```
  static defaultProps: DefaultProps = {  
    color: 'blue',  
    type: 'button',  
  }
```

6 references

```
  render() {
```



HANDS ON



E no iFood?





- Utilizamos hoje em dia?
- Já tentamos usar com react?
- Como poderíamos utilizar?





Mas e o PropTypes?

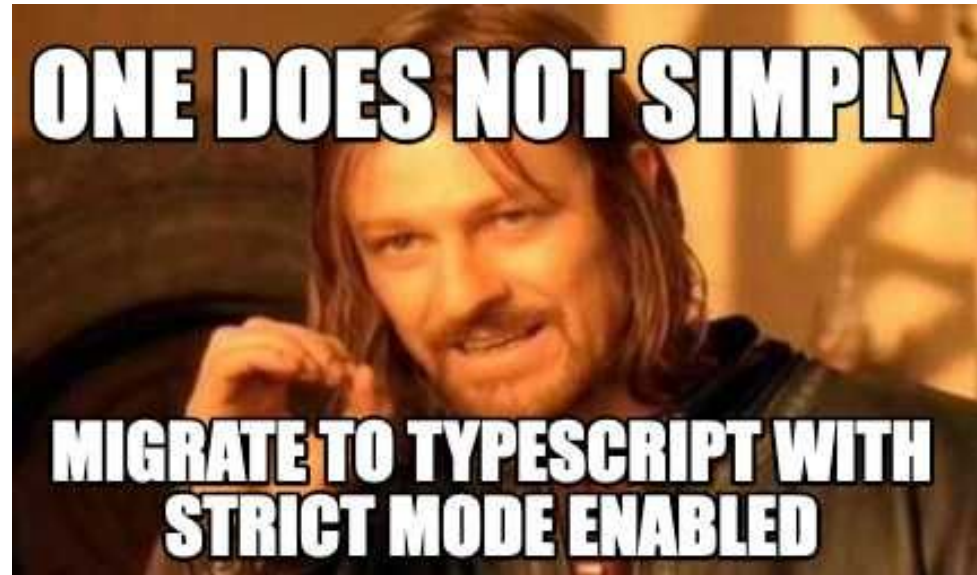
Ele não faz a mesma coisa?





Estratégias de adoção







Estratégia de adoção

- POCs
- Começar com novos projetos
- Utilizar modo não strict
- Estruturas simples
 - Incrementando aos poucos

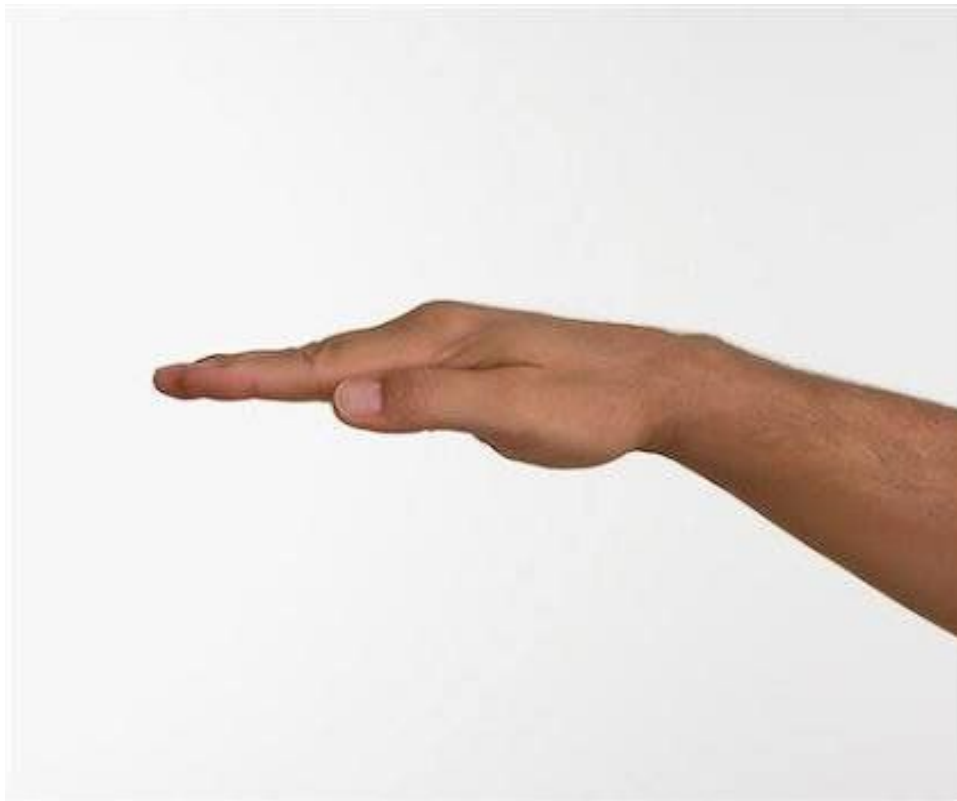


Perguntas?





Aplausos



Quem vai utilizar TypeScript a partir de hoje põe o dedo aqui!



#VemProlfood





Links Úteis



- Podcasts discutindo sobre Typescript:
 - [Dev na estrada](#)
 - [Lambda 3](#)
 - React Podcast
 - <https://reactpodcast.simplecast.fm/64>
 - <https://reactpodcast.simplecast.fm/41>
- POCs de React + Typescript (by luis.takahashi)
 - [Simple todo list](#)
 - [Rick and Morty Episodes Favourites](#)



- [Typescript no Slack](#)
- [Gist Helper \(Change js 2 Tsx\)](#)
- [React com Jsx](#)
- [Typescript introduction](#)
- [React e Typescript \(defaultProps\)](#)
- [Why and how to use Typescript in your React app](#)
- [Adding Typescript with Create React App](#)
- [Why i no longer use Ts with React](#)
- [Is React with Typescript a good combination?](#)
- [Moving to strict Typescript](#)
- [Heap Migration to typescript](#)
- Air Bnb
 - <https://news.ycombinator.com/item?id=19131272>
 - https://www.reddit.com/r/typescript/comments/aofcik/38_of_bugs_at_airbnb_could_have_been_prevented_by/a
- StackOverflow Surveys
 - [2017](#)
 - [2018](#)
 - [2019](#)
- Tutoriais gratuitos
 - [Udemy \(React + Hooks + Typescript\)](#)
 - [Barry Michael Doyle \(React + Typescript\)](#)

ifood

