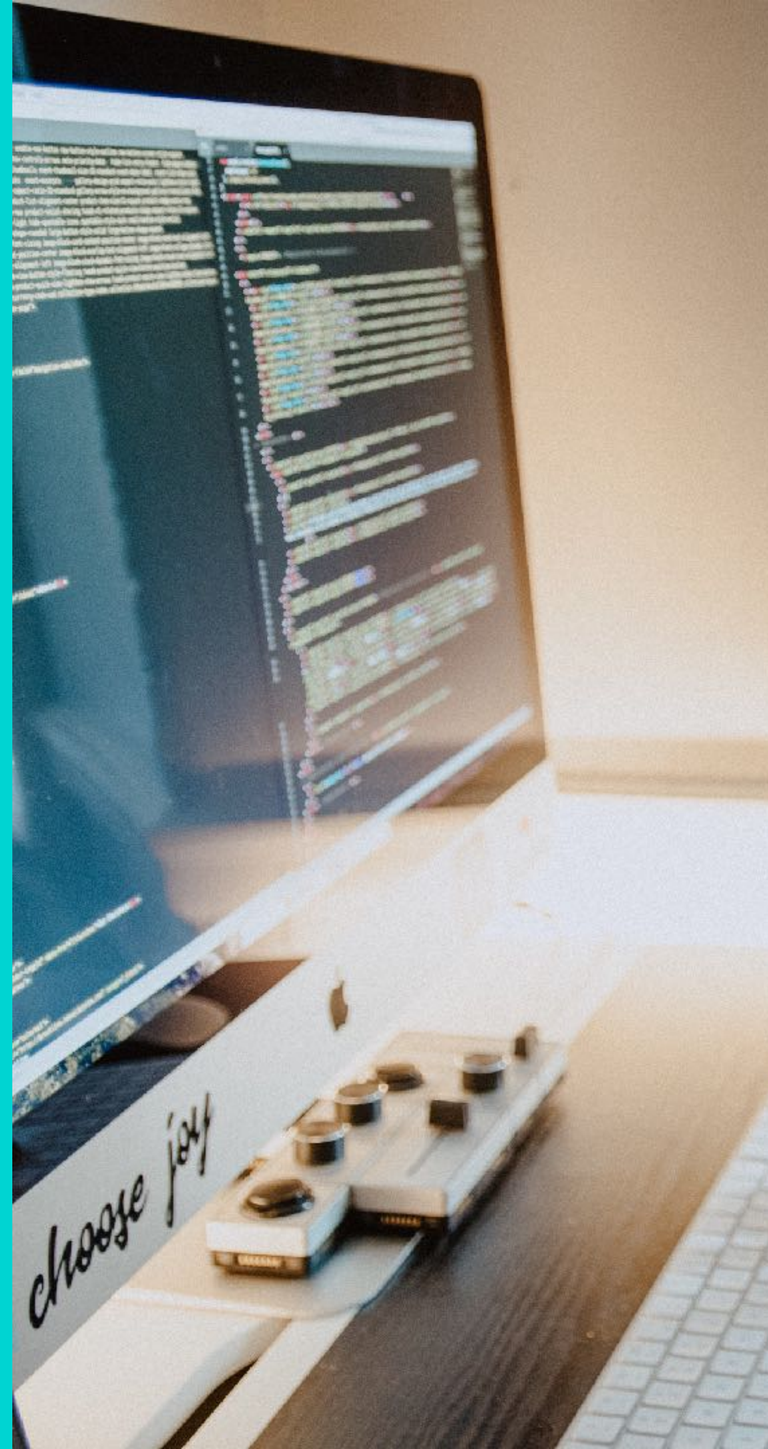
BEST PRACTICES

TECH & TOOLING - LANGUAGES

CSC491 | UTORONTO



COMMERCIAL OR PROFESSIONAL PROCEDURES THAT ARE ACCEPTED OR PRESCRIBED AS BEING CORRECT OR MOST EFFECTIVE.

THERE ARE SO MANY OPINIONS ON THIS TOPIC THAT NONE OF THEM ARE RIGHT. THIS LECTURE WILL COVER SOME PRO-TIPS ON HOW TO NAVIGATE THIS FIELD

IN THIS LECTURE

1. We will not go in depth on any topic as there are many many options and that would not be feasible
2. I intend to introduce you to the concepts and provide some examples
3. You should leave here understanding a breadth of options and understand new concepts
4. I will help you evaluate and pick options if required for your projects
5. I can answer questions based on my own experiences and opinions, but remember these are not the "correct" solution

BEFORE WE START...

Each of the following topics evolve with your company. What you need now does not match what you need in the future. This is a constantly changing area.

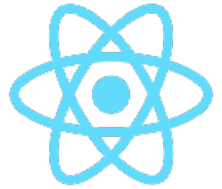
If you're lucky, you'll end up with a full department dedicated to these areas

Swift

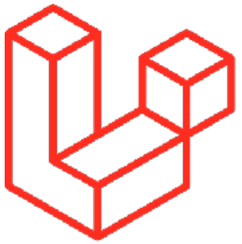
Ruby

Kotlin

Rust



React



Laravel

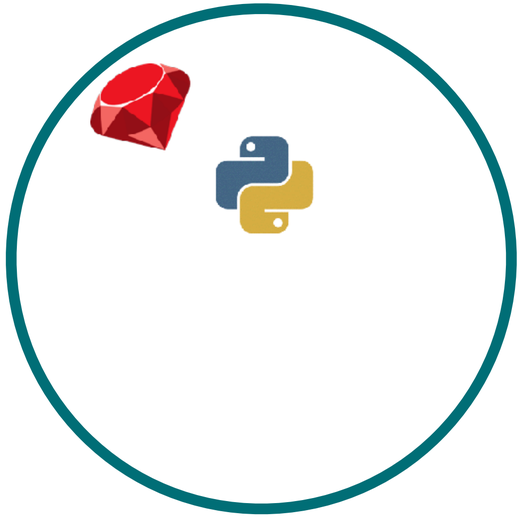
Angular

HOW DO I PICK A LANGUAGE / FRAMEWORK?

1. WHAT IS IS GOOD AT?

FRONT END? BACK END? OS?

SYSTEM + SCRIPTING



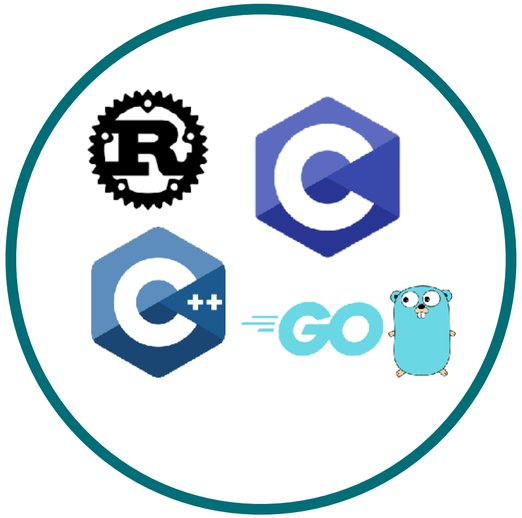
MACHINE LEARNING + DATA

OPERATING SYSTEM

WEB SYSTEMS

VIDEO GAMES

MULTI THREADING / FAST



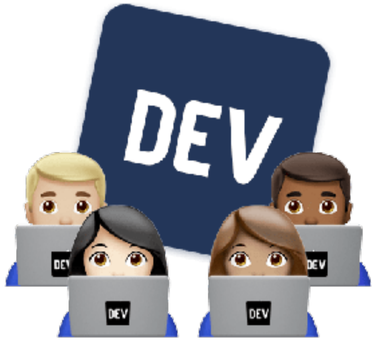
EMBEDDED

MOBILE

2. IS THERE A LARGE COMMUNITY?

GitHub

slack



Discourse

DISCORD

stackoverflow

3. HOW IS THE TOOLING?

LINTING

TESTING

SECURITY

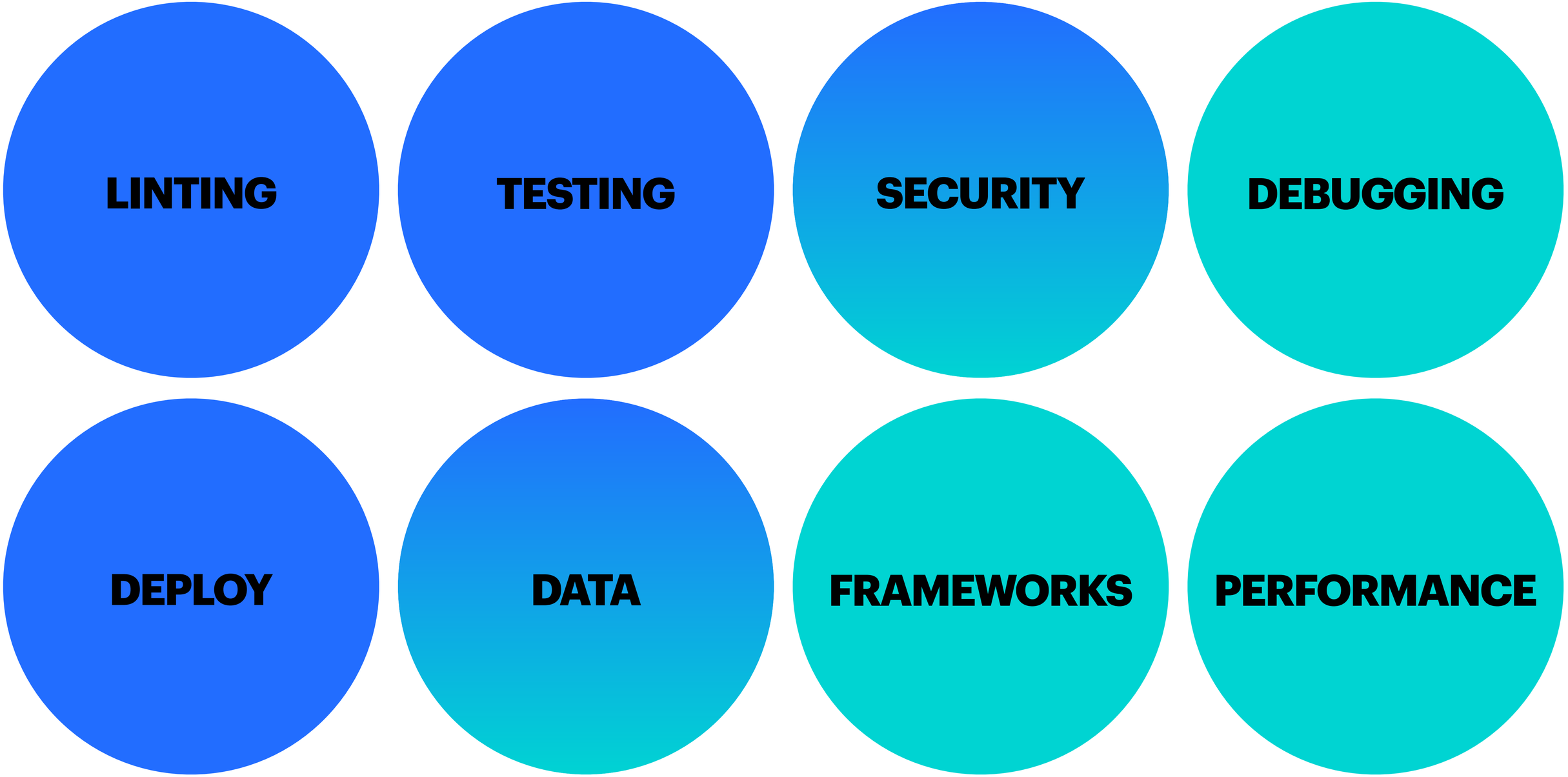
DEBUGGING

DEPLOY

DATA

FRAMEWORKS

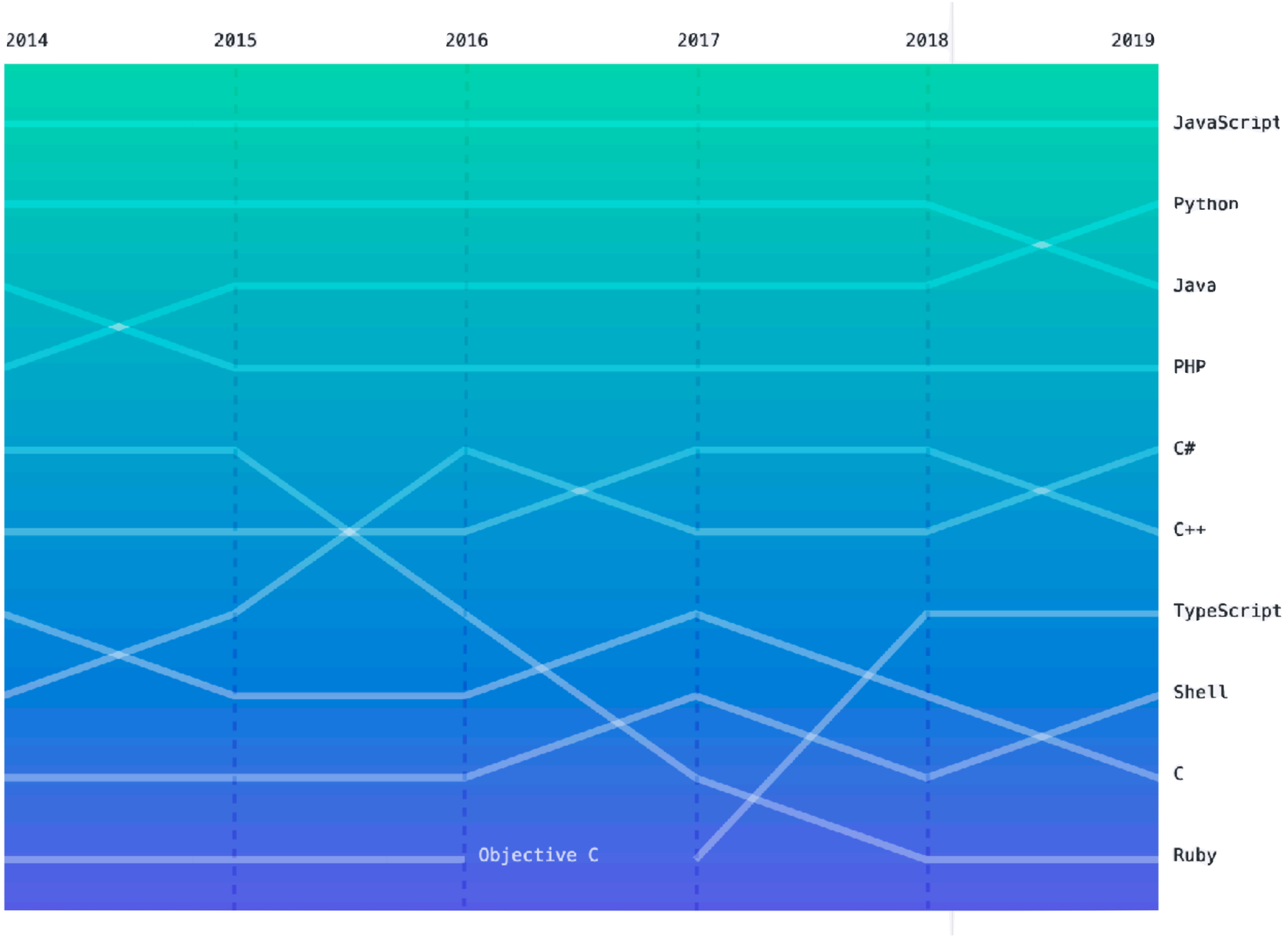
PERFORMANCE


LINTING
TESTING
SECURITY
DEBUGGING
DEPLOY
DATA
FRAMEWORKS
PERFORMANCE

4. CAN YOU HIRE FOR IT?

(E.G. IS IT A TOP LANGUAGE)

TOP LANGUAGES



via https://octoverse.github.com

FASTEST GROWING LANGUAGES

CHANGE IN PROGRAMMING LANGUAGE USE, 2018–2019

01	Dart	532%
02	Rust	235%
03	HCL	213%
04	Kotlin	182%
05	TypeScript	161%
06	PowerShell	154%
07	Apex	154%
08	Python	151%
09	Assembly	149%
10	Go	147%

via https://octoverse.github.com

CREDITS

- PHOTOS
  - https://unsplash.com/photos/YK0HPwWDJ1I
  - https://unsplash.com/photos/uf2nnANWa8Q
- CONTENT
  - https://octoverse.github.com