

How to be proficient in a programming language

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Proficiency

Read and understand

To ponder on solutions

To write (or ease the learning curve into it)

Professionally
Python (and Ruby)

Open-source
Go (and Rust)

Prototypes

Rust, Lua, TypeScript and Go

In the past

Elm, ActionScript, PHP and JavaScript

Different paradigms and styles

Imperative and declarative

Functional and object-oriented

Strong and weak typing

Dynamic and static typing

Compiled and interpreted

How?

The idea is to share my learning hacks :)

1. Break the ice
2. Automate something boring
3. Guided tour to complexity
4. Get hands-on with it

1. Break the ice

- Syntax
- Style
- Paradigms
- Environment
- Background

Big book or long course

...but **don't worry** about!

2. Automate something boring

- Try it
- Get things wrong
- Understand where you are

Download or scrape something, social media bot, re-write a part of a project...

Be **original**, allow you to **feel** it!

3. Guided tour to complexity

- Hands-on tutorials
- Mix short tutorials (talks, blog posts)
- Explore in-depth series (video courses, blog series)

It is time to **think** about a pet-project!

Understand the environment, the blank spaces, and **ask** questions:
deployment, integrations, tests, etc...

4. Get hands-on with it

- Trial and error
- Create solutions beyond supporting materials
- Patchwork

It is time to **build** a pet-project!

You have **autonomy** to know what you don't know... and to your own research!

Examples

Python

1. Coursera
2. Audio cutter
3. The Flask-Mega tutorial
4. Whiskyton

Examples

Go

1. The Go Programming Language
2. Twitter automation
3. Learn Go With Tests
4. Minha Receita

Examples

Rust

1. Programação Funcional e Concorrente em Rust
2. Egg Mode tutorial
3. Telegram bots
 - Shopping list (database)
 - Anti-spam (data science)
4. .. to be defined ;)

Thank you :)

Happy hacking!

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