

So You Want to be a Programmer

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github.com/Kashomon/to-be-a-programmer

Updated: May 17, 2017

So, you want to be programmer? This guide is intended to give you some places to start!

Getting Started

- *Get a Computer!:* First you need a computer! It doesn't necessarily need to be super fast, but you do need your own. Ideally, it would be installed with Linux or MacOS operating systems, but Windows is ok too.
There are lots of places that sell refurbished computers for cheap. For example, check out Green PC in Tacoma, InterConnection in Seattle, and FreeGeek in Portland.
- *Learn the Tools:* Programmers must develop expertise at both coding and the tools they use.
 - Choose a Language. Python, JavaScript, Go, Ruby, and Java are all good options. Prefer a language that's commonly used.
 - Choose an editor. I use Vim, but there are lots of awesome editors out there including Emacs, Sublime, IntelliJ, Notepad++, and many others. Prefer an editor that can be used for many different languages.
 - Learn about version control systems and choose one for your projects. The most common is Git followed by Mercurial. Try using Github (<https://github.com>) or BitBucket <https://bitbucket.org/>.
- *Read:* Reddit's guide to getting started with programming: https://www.reddit.com/r/learnprogramming/wiki/faq#wiki_how_do_i_get_started_with_programming
- *Read:* "Teach yourself to Program in 10 Years" by Peter Norvig: <http://norvig.com/21-days.html>
- *Read:* The posts in the Learning to Program topic on Quora: <https://www.quora.com/topic/Learning-to-Program>
- *Read:* "Why is Learning to Code so Damn Hard" by Erik Trautman: <https://www.vikingcodeschool.com/posts/why-learning-to-code-is-so-damn-hard>
- *Online Schools:* There are lots online schools out there that will help get you started.
 - *MIT Open Course Ware* has dozens of excellent free lectures on Computer Science. <https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/>
 - *CodeAcademy* (Mostly Free) has tons of awesome lessons and interactive tutorials. <https://www.codecademy.com/learn/all>

What Next?

At this point, you're getting comfortable doing simple tasks with your programming language, you have a go-to editor, and you maybe even have some code on Github. And, you have even read some of the guides above! **What next?**

- *Practice:* Keep honing your skills. Try doing programming competitions and practice problems at CodeChef, TopCoder, and Google CodeJam.
- *Find a Project:* Find a project that sparks your interest. It could be a hobby project, or app, or a website.
- *Find People:* It's always more fun and rewarding to work with others. If you're still in school, check out clubs in your university. If you're out of school, try Meetups, Facebook groups, or an Open Source project that interests you.
- *Develop a Specialty:* Developing a specialized interest is a great way to find new projects, to meet people, and to differentiate yourself when you enter the job market. Like games? Try making a game. Like design? Try making an app or a website. Like math? Read up on machine learning and try working with some of the open data sets available.