## So You Want to be a Programmer

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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 Seattle.
- 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, etc. Prefer an editor that is capable at many different languages.
  - Learn about version control 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 learning how to program: 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: Erik Trautman's "Why is Learning to Code so Damn Hard": 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. Not only that, but you've got a good idea about what the whole programming thing is about and maybe even ideas about how you would put together something that could actually be useful, like a web site or mobile app! 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 probject, or app, or a website.
- Find People!: It's always more fun and rewarding to work with a team. If you're still in school, check out clubs in your university. If you're out of school, try Meetups, or Facebook groups.