Why it is hard for many people to learn a programing language?

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Learning a programing language is an pretty interesting thing for many people, but definitely not so easy for most of them. We use our computer, IPad, smart phone almost every day, none of the applications in them are not developed with some specific programming language. Aren't we curious how the cold and dull codes were transformed into these software with so variety of functions? In this essay, I will
share my owns story of learning programing languages. Through my story, it may help to understand why it is so difficulty for many people meanwhile, although I am not a professional, or even a skilled programmer.

How I start to learn a programing language?

It was roughly 20 years ago when I was in college, I start to learn my first programing language: BASIC. Computer was a kind of advanced machine, very rare, but with only very basic functions, even not good as the power calculator today. What we were taught for this language is, how to write a simple computing programs with only several lines. For a period of 5~6 years after that, I didn't get any chance to learn programing again.

How I begin to love programing?

Things began changed when I start work after my graduation from graduate school. My work required me to control a working machine with computer. I had to develop my own software to realize them. My colleagues developed their tools with C++ and Visual Basic, respectively, which pushed me to learn both these two languages. At that time, I was self-taught through reading some programming books and my colleagues programs, and practicing them on the computer. It was hard at the very beginning, but when I found that I could collect data automatically, and move my machine as I wanted with my programs, how satisfied and sel confident I was at that very moment. Gradually I realized that I had begun to love and enjoy programing. I spent most of free time learning and practicing programming. When I pursed my doctor degree, and needed to build my own auto-controlled experimental setup, I mastered LabVIEW programing techniques in couple of months and rooted my developed programs into the setup easily. I felt I succeed as non-professional programmer.

How I am doing today?

After I moved to USA and studied for another degree in statistics, I had the chance to learn statistical programming language, SAS and R. I was confident and comfortable to learn and practice them. I believed that it was my programming skills that helped me find my first formal job in a total brand new field. Today, I am enjoying every minutes playing SAS and R every day in my work and after work.

How I expect for future?

With the data mining and machine learning techniques[1] matured under the extensive needs of high-performance computing for big data set, programming

is becoming one of the most important key skills in our daily work, specially for people who work in IT companies, and data scientists who work in marketing and financial field. Mastering one or two programing language will definitely help you to find your dreamed positions. For me, I am seeking a move and promotion from my current role, so I decide to learn Python. Hopefully it will benefit my future job seeking.

Summary

From my personal experience, I think three aspects are quite important to learn a programing language quickly:

1. Interests
2. Hands-on practicing
3. Motivation

No one could easily learning a programing language without interest, without motivation, and the last without hands-on practicing, practicing, and practicing[2]...

Thanks

Finally, I want to express my gratitude and appreciation to all those professors who devote their time and patience and enthusiasm to contribute these free programing teaching lectures to the common people like me so that they can have the invaluable opportunities to learn a programing freely. I also want to say thanks to COURSERA, it is you that makes all this happened.

Reference
1. http://en.wikipedia.org/wiki/Machine_learning
2. http://www.wikihow.com/Learn-a-Programming-Language