Software Engineer

So you want to become an engineer?

About Me

Where are you from?

Mississauga, ON. Originally from a country full of happy people no matter the situation....😉😌

Past experience?

Experienced dishwasher @ wonderland. Kidding!

Academics?

CS deg at an Ontario west coast uni. Lots of self learning videos too!

Where motivates you?

Executing a vision and influencing others to succeed.

When did you start?
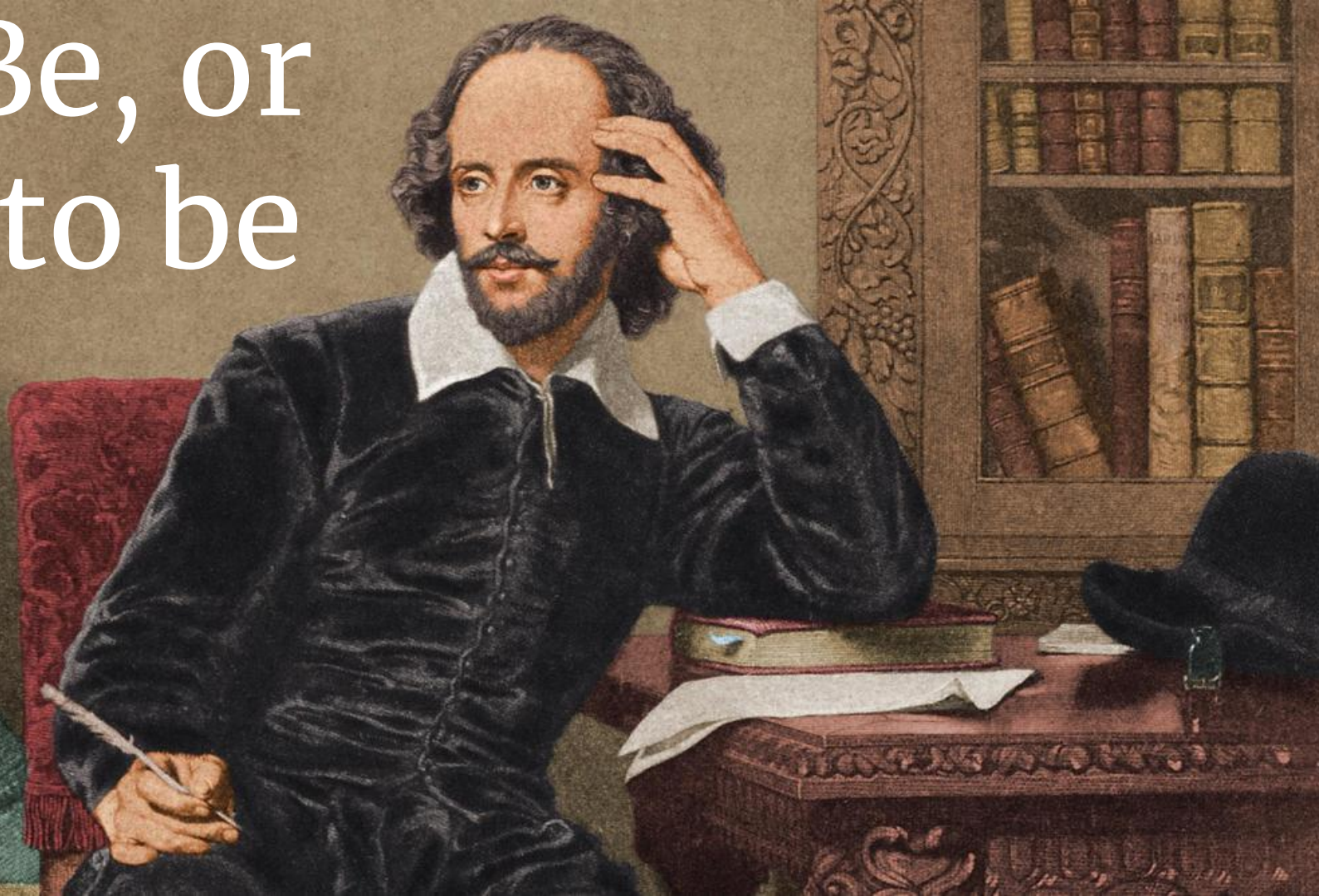
Started my software engineering journey in 2009

Favorite hobb?

Music makes me lose control 🧸

To Be, or not to be

onlinegifs.com

The Journey

- Year of initiation
- Started as a business analyst - (not sure what I was analysing but more like data entry)
-

Motivation – why software??

Why did I become a software engineer?

- Machines are obedient??
- I enjoyed troubleshooting and solving problems
- Love to create
- I am comfortable with human and I enjoyed working with them (maybe not all)
- Psst! – It pays well……

The Becoming...

1. Pick one - there are different types of software engineer
Major categories are Backend, Frontend, Testers, DevOps, Security & Full stack engineers. Pick what comes natural to you.

2. Degree are nice but not required
You really don't need a CS degree to become a software engineer, however it does provide basic foundation to become really good at it.

3. Starting from zero to hero
There's plenty of resources to help get started. Pick any programming language that make sense to you.

4. Do it yourself
Start right from the comfort of your home. What you need are your pretty fingers and a computer (well and some resources). Great softwares are build in the garage.

5. Attend coding conferences
This is a great way to network and meet like-minded engineers. You'll get lots of valuable information.

6. Certifications
This is a rather quick and easy way to get into the software engineering industry.

Do not underestimate the power of bootstraps

Take online courses	**Sign up for code camps**	**Certification programs**

"bootstrapping usually refers to the starting of a self-sustaining process that is supposed to proceed without external input." – user78203 🧐

Online Courses

There are so many online resources out there for software engineering class and programs.

How do you pick which one is right for you?

Code Camps

BrainStation®

LIGHTHOUSE LABS

Rangle.io

CODING DOJO ACADEMY

If you have the ($$$) budget and time. This is a viable option. Boot Camps usually provide hands on experience.

It can be comprehensive and it will require your commitment!

Certifications

Once, you've determined the direction you want to take then find a specialized certification programs in that field.

Certifications get outdated really quick but they remain an integral part of the tech industry.

It can also be used as a source of proof in a professional organizations to validate your knowledge and ability.

Getting the experience

- Volunteer your service (work for free🤭😜)
- Hands on personal project
- Accept local gigs, even the free ones.
- Practice! Practice! Practice!

- Get an intern placement/position
- Showcase your personal projects
- Join open source community and contribute

- Pursue projects and opportunities you can learn from.
- Pursue projects you can grow from.
- Hands on personal project

There are lots of ways to be successful and it's defined differently for everyone.

Resources – Learning

Coursera
https://www.coursera.org/

Udemy
https://www.udemy.com/

Lynda
https://www.linkedin.com/learning/

Skillshare
https://www.skillshare.com/

Pluralsight
https://www.pluralsight.com/

Codecademy
https://www.codecademy.com/

Treehouse
https://teamtreehouse.com/

EdX
https://www.edx.org/

Resources – Coding

Stackoverflow
https://stackoverflow.com/

Codewars
https://www.codewars.com/

Git
https://github.com/

https://bitbucket.org/

https://about.gitlab.com/

Codepen
https://codepen.io/

IDEs (Integrated Development Environment)
Lots of preference, here's a few - your choice!
VS Code - https://code.visualstudio.com/
IntelliJ - https://www.jetbrains.com/idea/
Atom - https://atom.io/

What's Next?
PaaS, DevOps tools……

Resources – Keeping up to date

Hacker News
https://news.ycombinator.com/

Follow social media engineering trends
Psst! engineers love twitter!

Tech Conferences & Meetups
There are abundant tech conferences out there. Most companies usually host their own conference e.g. Google IO, Twilio signal, CES, Facebook F8 and the local ones too!

Review Code
You can find some in the aforementioned ^^^ Git resource.

```
FOR A BETTER WORLD                    ALWAYS IMPROVE




        def success(dedication, persistence, passion):
          dedication += 1 # dedicate yourself
          persistence += 1 # be persistent
          passion = True # have passion

          if passion == True:
            magic = dedication + persistence
            return magic
          else:
            magic = 0
            return magic

        # love it. make mistakes. learn. keep grinding.


OPEN YOUR MIND                        FOR FREEDOM
```

Consulting

The risks, the perks and the lesson learned.

BEN-ERIS Technology Corp

The risks

You are your own employee -
"No work, no pay"

You're liable for things -
damages, health, thefts, you get the idea.

Job security
As an IC, your gig can be cut anytime and severance pay does not exist in this world.

No client (employer) benefits -
Employer does not provide benefit, bonus and career advancement that comes with been a full-time employee.

The perks

The benefits outweighs the risk, if you play it right

You are your own boss
Usually would set your pace and the terms of your working conditions.

Choose the work that you like

Earn high, pay low
You'll probably earn more than regular employees and may pay lower taxes depending on how your business is setup ("*the power of incorporation*" *- rich dad, poor dad*).

New experience
Each client have different task

You become ~~the expert~~ knowledgeable
Most like you'll be versatile in a lot of things, hence the expansion in knowledge and the possibilities to work in diverse engineering spaces. Also mean you'll be a good fit for most job postings.

Psst! I get calls and emails almost every day from companies and headhunters.

Lesson Learned

- You must know your worth!

- Say yes to every project, even if you don't know how to do it.

- Having a structured plan and setup is crucial for success. Freestyling usually don't work

- Time management skill is a must have.

Thanks!

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in www.linkedin.com/in/e8-isaac

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