

# How I Became An Automation Engineer

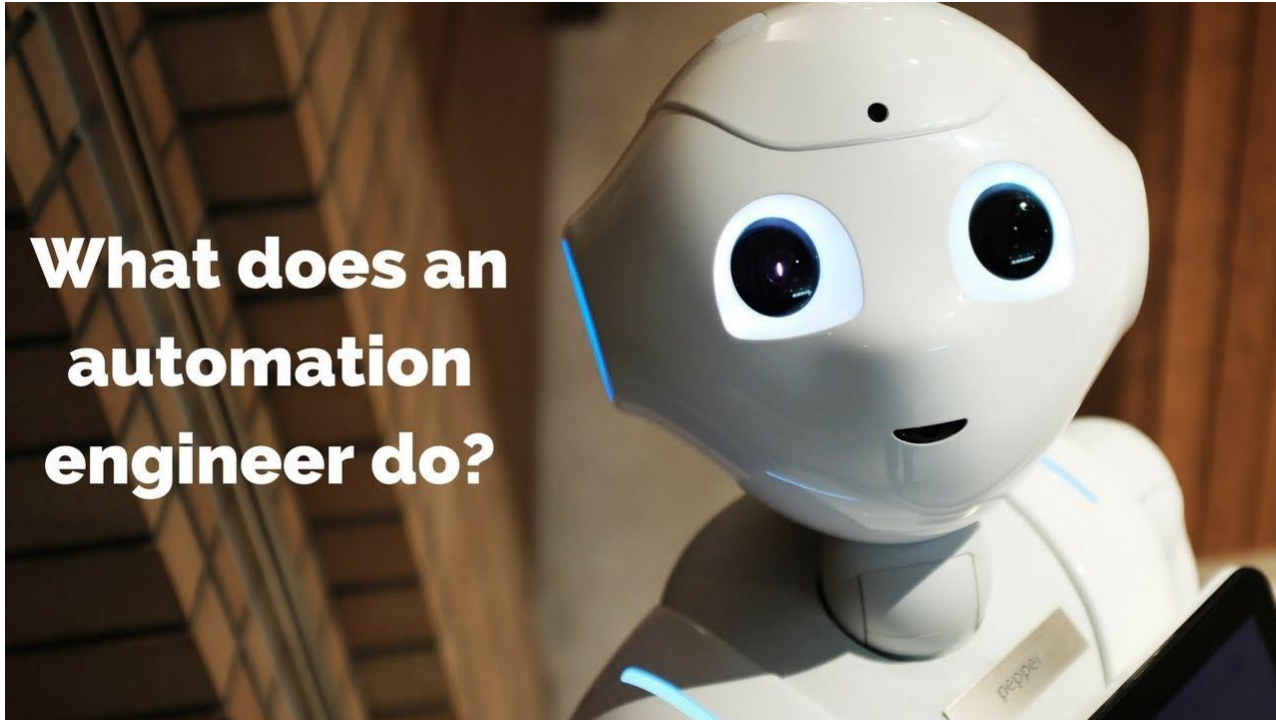


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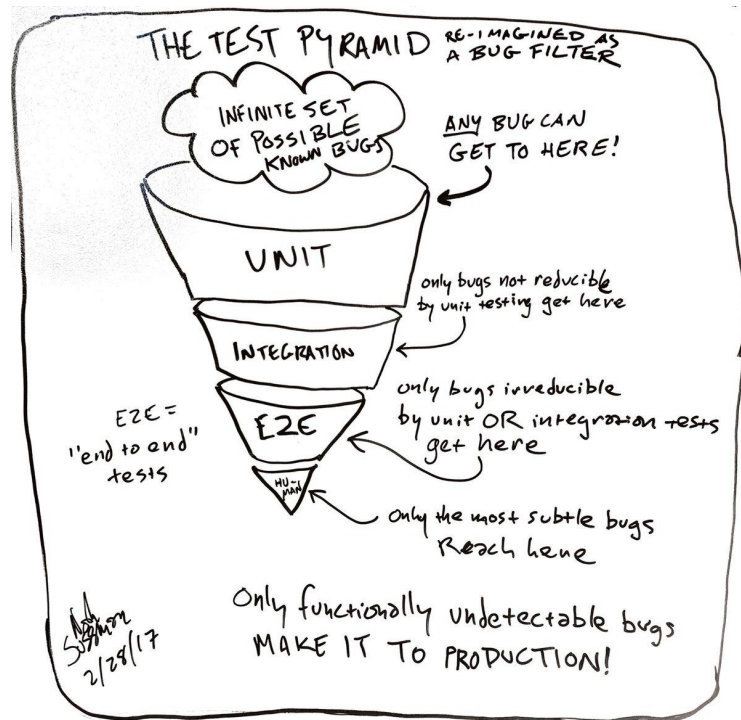
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**What does an  
automation  
engineer do?**



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# Lots to learn about Testing



# An Effective Investigator

- I wanted to be an effective technical investigator
- Yet there was so much work to do and much of it revolved around me stumbling into my developers messes.
  - Certain parts of the application would be broken
  - There was a lot of need to regression test such that it took up too much of my time
- How could I automate the boring parts of regression testing?

# Here's my confession...



**KEEP  
CALM  
AND  
CONFESS  
NOW**

- I learned to code to write UI automation
- It's a well-worn path with lots of resources even if it isn't the best way
- I like the idea of learning a language (coding) and using the tools examples at the same time

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# Doing Code Reviews

- Each time I've built a UI framework I've gotten better / improved either in code or process
- Regular code reviews from other developers
- It's fun looking at other people's unit tests. It's even more fun to find flaws in the logic of those tests
- You have to be able to read and understand code -> code literacy

# Practice

- Each time I've built a UI framework I've gotten better / improved either in code or process
- I'm constantly looking at how others build and organize their code to see what I can do better. Then I steal their good ideas!



# Interviews

- Partially a Coding role
  - FizzBuzz or similar entry level coding challenge in CoderPad
- Partially a Testing role
  - How would you test an email system?
  - How would you test a facebook like button?
- Lots of web technology questions



# Automation Engineering @BloomNation



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# A few things I do...

- Code Reviews, mostly for our JavaScript stuff
  - This is kind of fun. I naturally gravitate to looking at what our unit tests do
- Maintain and build our UI test automation across two different applications
- Grep through logs, debugging
- Production Support & Monitoring
- Deployment help
- **Feature Testing**

# Recently I also worked on...

- Automated tests for SEO and our eCommerce checkout
- API tests using Dredd based on Swagger specification
- Wrote a few unit tests in PHP
- Code Reviews, Configuration changes to our CI pipeline, process improvements
- Product Management
- Lots of Exploratory Testing

# Tools I tend to use

- Whatever will do the job
- Currently this includes
  - WebDriverIO
  - CypressIO
  - Postman to explore APIs & GraphQL
    - We also have a growing set of tests we can run against our QA and Production environments
- I enjoy using JavaScript
  - It's better to write your test code in a language that your company supports because you'll be given more support

# Automation requires Exploration



- It's well understood you have to explore, test & understand your application before you can automate any of the processes around it
- Among entrepreneurs it's well understood that you do things that don't scale first. Then you scale them when you need to.

# 60/40 split

- Given all my responsibilities I anecdotally spend about 60% of my testing time around automation (new code, maintenance, doing some specific test automation task) and around 40% exploring
- These aren't hard numbers and change with regard to time / feature
  - I work on individual features sometimes and other times not



- What Oracles do I use?
  - Not using vary many Oracles in my testing. Comparison applications
- How am I using my automation skills to help dig deeper into the product and make our testing better?
- How do I automate the boring things and yet keep the high value work?

# Challenges

- Make decisions based on customer data / analytics
- I need to continue to increase my JavaScript programming experience (breadth and depth). Become a better software developer.
- I need to continue to increase my understanding of design patterns.
- How can I design better tests?
- How can I help accelerate our team?



# Continuous Improvement

- I see myself having more value as I am able to teach / coach. This is something I haven't grabbed a hold of yet
- I know some of the work I've done is isolated and doesn't necessarily help the team accelerate as well as I could
- What design patterns do I use?
  - How can I get my tests built into our development pipeline?



# I'm not sure this role has a future

- I do work that a developer could do if they had the time or desire
  - I'm helping to offload some of this work to my developers
- I'm reminded of what the book *Accelerate* says about Test Automation:
  - "It's interesting to note that having automated tests primarily created and maintained either by QA or an outsourced party is not correlated with IT performance.
  - The theory behind this is that when developers are involved in creating and maintaining acceptance tests, there are two important effects.
  - First, the code becomes more testable when developers write tests. This is one of the main reasons why test-driven development (TDD) is an important practice—it forces developers to create more testable designs.
  - Second, when developers are responsible for the automated tests, they care more about them and will invest more effort into maintaining and fixing them. "

# Questions?

Get in touch & get the  
materials::



# Thank You!



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