

From Chemist to Software Engineer in 5 months

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Where I Came From

- Bachelor's in Chemistry
- Worked in Pharma for 4 years
- Analytical and Formulation Chemistry
- Lab work



The Catalyst

ID#	1												
Name													
Ratio	Data	Filename	Sample Name	Sample ID	Sample Type	Level#	Ret. Time	Area	Heig	QC	Check Results	Mark	Peak
	Conc.	Std.	Conc.	Deviation	%Dev	Accuracy[%]							
NTP(BP)	NTP(DAB)		NTP(EMG)	NTP(EMG(50%))		NTP(Area/Height)	NTP(USP2)	NTP	NTP				
(JP)	HETP(JP2)		HETP(EP)	HETP(BP)		HETP(DAB)	HETP(EMG)	HETP	HETP				
HETP(User Defined)			T.Plates/meter(USP)	T.Plates/meter(JP)		T.Plates/meter(JP2)	T.Plates/meter						
(EMG)			T.Plates/meter(EMG(50%))	T.Plates/meter(Area/Height)		T.Plates/meter(USP2)	T.Plates/meter						
meter(User Defined)			Tailing F.	Tailing F(10%)	Resolution(USP)	Resolution(JP)	Resolution(JP2)	Reso					
)			Resolution(Area/Height)	Resolution(USP2)	Resolution	Resolution	Resolution	Resolution					
Separation	Peak	Valley	Ratio	Area%	Height%	USP	Width	Width(5%)	Width(10%)				
Noise	Quant.	Limit(QL)	Detect.	Limit(DL)	RF	Mean	RF	RF SD	RF %RSD	Calib.	Point	Mean	Are
Calib.	Point	Height	SD	Calib.	Point	Height	%RSD	Dev.Ratio	Date	Acquired	Custom	Calc.Result	1
Calc.Result	5	Statistic		DRE	Wavelength	DRE Factor	DRE						Cust
Time													
1	Main	STD	1.lcd	Main	STD	1	Main	STD	1	Standard(Calc.Point)	1	12.249	10074200
0.983772	-----	-----	-----	-----	-----	V	11.920	12.888	12339	12659	12682	12659	1265
0	0	12.157	11.849	11.828	11.849	11.849	11.849	15.285	15.285	12.043	11.849	0.000	0.00
84395	65422	65422	83037	84395	0	0	0	0	0	0	1.298	1.300	0.87
0.000	0.000	0.000	0.000	0.000	0.000	2.561	1.056	1.392	91.731	90.689	0.441	0.542	0.47
1.024038e+007	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.0000	3/16/2018	6:
2	Main	STD	2.lcd	Main	STD	2	Main	STD	2	Standard(Calc.Point)	1	12.228	10084475
0.983772	-----	-----	-----	-----	-----	V	11.904	12.864	12212	12534	12557	12534	1253
0	0	12.283	11.967	11.946	11.967	11.967	11.967	15.426	15.426	12.149	11.967	0.000	0.00
83561	64825	64825	82311	83561	0	0	0	0	0	0	1.299	1.300	0.87
0.000	0.000	0.000	0.000	0.000	0.000	2.571	1.056	1.397	91.745	90.705	0.443	0.543	0.47
1.025083e+007	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.0000	3/16/2018	7:
3	Main	STD	3.lcd	Main	STD	3	Main	STD	3	Standard(Calc.Point)	1	12.291	10088380
0.983772	-----	-----	-----	-----	-----	V	11.960	12.936	12323	12639	12662	12639	1263
0	0	12.172	11.868	11.846	11.868	11.868	11.868	15.333	15.333	12.064	11.868	0.000	0.00
84262	65220	65220	82892	84262	0	0	0	0	0	0	1.301	1.302	0.86
0.000	0.000	0.000	0.000	0.000	0.000	2.556	1.056	1.395	91.665	90.623	0.443	0.544	0.47
1.025480e+007	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.0000	3/16/2018	7:
4	Main	STD	4.lcd	Main	STD	4	Main	STD	4	Standard(Calc.Point)	1	12.228	10065983
0.983772	-----	-----	-----	-----	-----	V	11.904	12.864	12231	12574	12596	12574	1257

Initial Steps

- Learned some Python to automate some of my work in June 2018
- Along the way, took free courses online
 - Harvard CS50
 - MIT 6.001x, MIT 6.002x
- Made some crappy personal projects and really enjoyed it.

Serendipity

- Laid off in Oct 2018
- Seemed like a sign!
- Enrolled at a remote coding academy (Lambda School) in Nov 2018
- Continued self-teaching outside of it

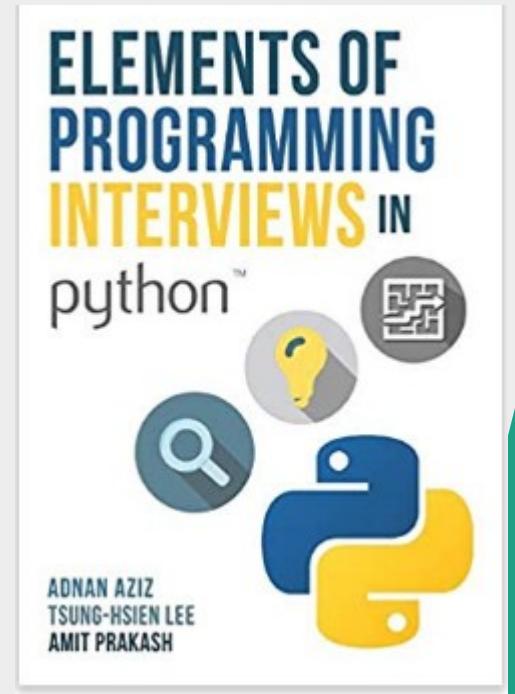
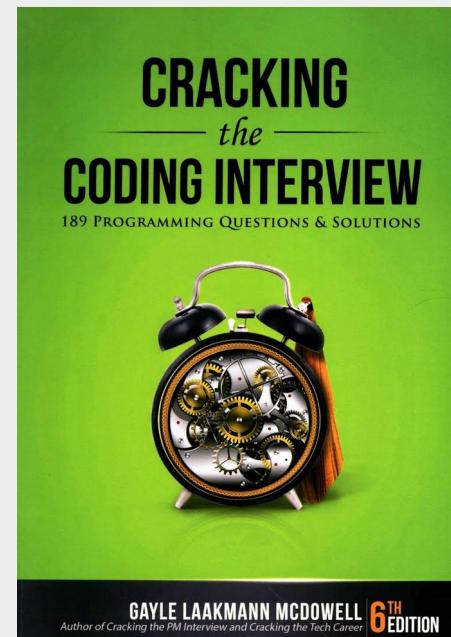


Interview Prep Cycle

- Not getting responses? Improve resume, network, coffee chats.
- Not hearing back after phone screen? Practice phone interviews with friend.
- Not hearing back after coding challenges? Algorithms/DS practice.
- Not hearing back from onsites? Behavioral or whiteboarding practice.

Resources I Used

- Elements of Programming Interviews
- LeetCode
- Cracking the Coding Interview
- HackerRank/CodeWars



Interview Stats

- Applied to 21 places
- Positive responses from 5
- 0% success rate with cold applications
- February 2019, received two offers!

Source	Heard Back with Positive Response	Phone Interview	Coding Challenge or Take Home	Onsite(s)	Offer
Meetup					
Meetup					
Career Fair					
Career Fair					
Friend					

Thanks

- San Diego Python User Group for the awesome Saturday meetups
- Lambda School for the structure and classmate emotional support
- Chris Bui, Samira Kiani, David Osuna, Jeff Szielenski from the CTCI meetup for whiteboard coding practice with me