

Why You ~~Should~~ Can Learn To Code

(And Why Learning To Code Can Be Like Learning To Cook)

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Why do we learn to cook?

- To eat
- Eat healthier/more affordably
- Spend time with family
- Tradition
- Hobby



What's missing from the list?

- Become a professional chef



Learning to code
doesn't have to
mean becoming a
professional
software
developer

Thanks to
<https://www.robinsloan.com/notes/home-cooked-app/> for the inspiration



Coding doesn't have to mean...

- Hacking day and night
- Intimate knowledge of computers and hardware
- Complex systems and algorithms



What coding can be used for

- Automating repetitive tasks
- Answering questions about data
- Solving small problems with useful tools
- Experimenting



You might be a coder already!

If you've ever...

- Put a formula in a spreadsheet
- Created a report in Power BI
- Created a workflow in Power Automate
- Made a customization in Salesforce

Microsoft Excel interface showing a complex formula in the formula bar:

```
=SUM(OFFSET(monthly_financials[@[Title_1]],0,OFFSET(quarter_mapping[[#Headers],[Column_Offset_Start]],MATCH(OFFSET(quarter_mapping[[#Headers],[Output_Format]],MATCH(quarterly_financials[[#Headers],[Q-6]],quarter_mapping[Heading_Format],0),0),quarter_mapping[Output_Format],0),0)-1):OFFSET(monthly_financials[@[Title_1]],0,OFFSET(quarter_mapping[[#Headers],[Column_Offset_End]],MATCH(OFFSET(quarter_mapping[[#Headers],[Output_Format]],MATCH(quarterly_financials[[#Headers],[Q-6]],quarter_mapping[Heading_Format],0),0),quarter_mapping[Output_Format],0)-1))
```

	F	G	H	I	J	K	L	M	N	O
Q-7										
#N/A		0	0	0	0	0	0	0		
#N/A		0	0	0	0	0	0	0		
#N/A		1,000	0	2,400	0	9,450	11,022	10,257		

Power Automate interface showing a workflow for creating an approval in Teams when a file is added to a SharePoint folder.

Workflow steps:

- When a file is created (properties only)
- Get my profile (V2)
- Create an approval (V2)
 - Approval type: Approve/Reject - First to respond
 - Title: Review new SharePoint file [body/FileNameWithExtension]
 - Assigned to: [body/Path]
 - Details:
 - Added to: [body/Path]
 - Created by: [body/Author/DisplayName]
 - Created by: [body/Author/Email]
 - Created time (UTC): [body/Created]
 - Item link: [body/Link]
 - Item link description: [body/FileNameWithExtension]
- Apply to each
 - Run a flow built with Power Automate for desktop
 - Send an email

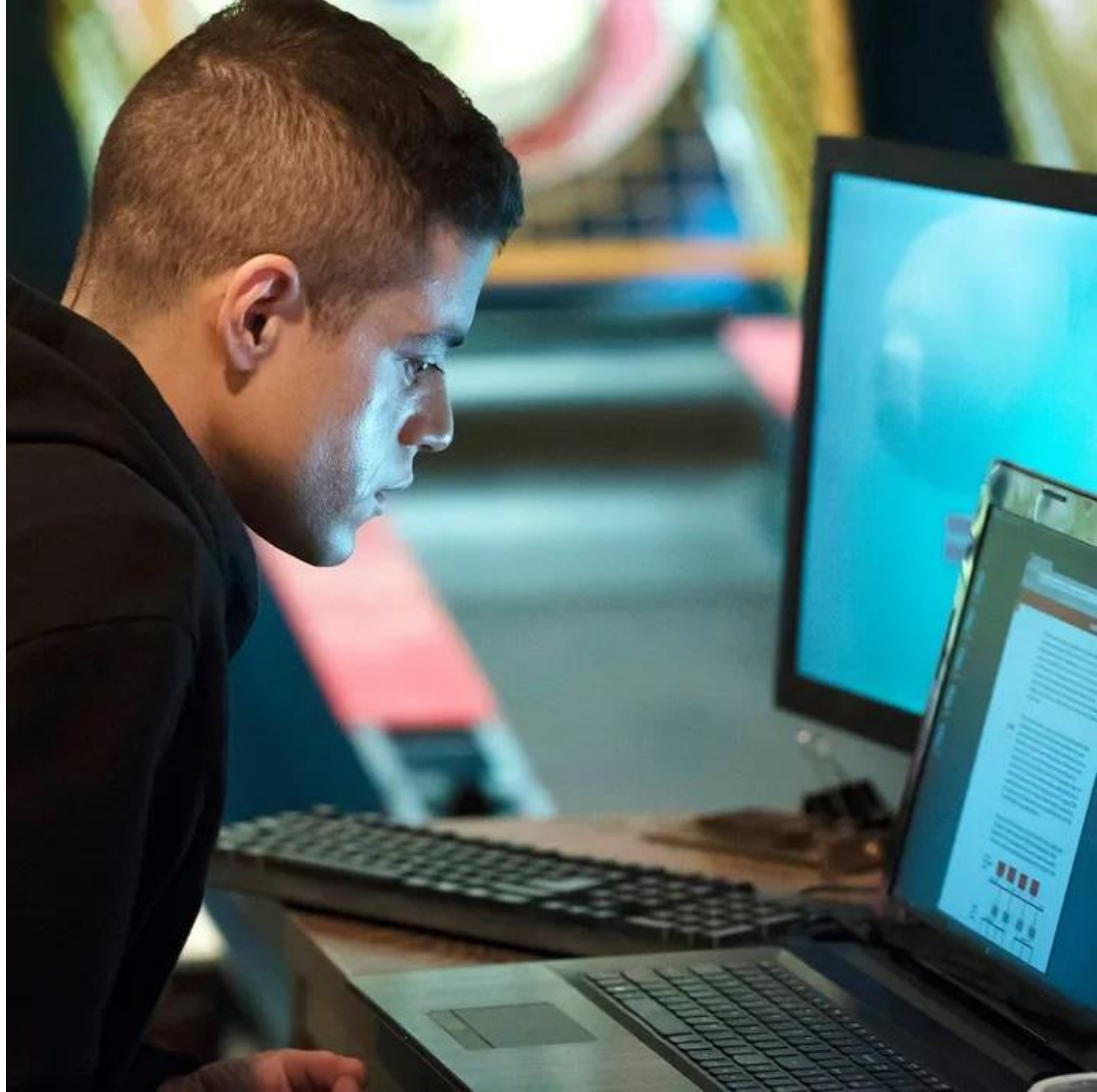
Attributes of a good prospect researcher

- Inquisitive
- Analytical
- Attention to detail
- Organizational skills
- Critical thinker



Attributes of a good software developer

- Inquisitive
- Analytical
- Attention to detail
- Organizational skills
- Critical thinker



Software in Prospect Research

- Automating daily tasks
- Moving/Creating/Updating data in different software systems
- Creating reports or workflows
- Predictive analysis
- Machine learning

**MAIL
MERGE FOR
EMAIL CAMPAIGNS**

**SEGMENT
THE DONOR
DATABASE**

**CAPACITY
SCORES USING
MACHINE LEARNING**

**NEURAL NETWORK
TO PREDICT MAJOR
GIFT PROPENSITY
FROM FAVOURITE MIGHTY
MORPHIN' POWER RANGER**



Or maybe it's just for you!

- Maybe you're just curious
- You want a new hobby
- You've always wanted your own twitter bot

**LEARNED WHAT
A FOR LOOP IS**



**NEVER WROTE A
LINE OF CODE AGAIN**

So you'd like to learn to code

Try python!

- Great at data processing
- Free, open source, cross-platform
- Lots of great online resources
- Can do lots of different things, from machine learning to web applications
- Looks the most like English

```
with open('../data/companies_needing_notes.csv', encoding='utf-8') as csvfile:
    reader = csv.DictReader(csvfile)
    for company in reader:
        name = company['Client']
        domain = company['Website']

        notes = companies.get(name)
        if notes is None:
            print("No notes for {}".format(name))
            continue

        print("Looking up {}".format(name))

        response = requests.get("https://api.hubapi.com/campaigns/v1/campaigns/{}?fields=notes".format(domain))

        if response.status_code != requests.codes.ok:
            print("Couldn't find {}".format(domain))
            print(response.text)
            continue

        data = response.json()

        if len(data) == 0:
            print("Couldn't find any companies with domain {}".format(domain))
            continue

        companyIds = []
        for c in data:
            companyIds.append(c['companyId'])

        for note in notes:
            print("Posting note to {}".format(companyIds))
```

Resources

- Canada Learning Code
 - [Workshops](#)
 - [Intro to python course](#)
 - [More courses](#)
- Free online courses
 - [Udacity Intro to python course](#)
- Continuing education courses at local university/college
 - [Python data science courses](#) at UofT



Thank you!

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