Cultivating Data Science on Product Teams

July 28, 2021



Our teams are like gardens

Cultivating skillsets (like data science!) on different teams leads to AWESOME ideas, collaborations, & applications

Such as...

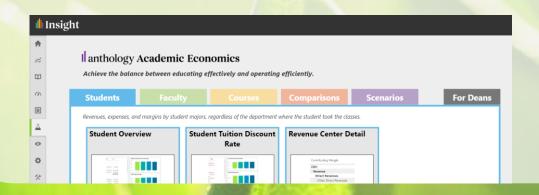




Ryan S Data Analytics Consultant



Our product allows our customers to visualize and explore their financial data in detail. It helps them track their spending and strategize for the future.



The problem:

Whenever we get new financial data from an AE customer, any uncategorized spending had to be processed manually.

Jill Goodwyn

Data Scientist

This required days of time per data file and was susceptible to human error.





Ryan S Data Analytics Consultant



The idea:

Ryan & Jill teamed up to build an application to automatically categorize new financial data and find approximate matches for unknown data

This took us from **25 hours** per file to a few clicks and about **15 seconds**





Ryan S Data Analytics Consultant



Jill Goodwyn Data Scientist

The bottom line:

Yes, this helps our internal users, but... This ultimately reduces the time to value for customers!







Fast Facts

- Created with Python using Tkinter user interface package
 - Script took ~1.5 weeks to develop
 - UI took 1 day to create
- Local executable
 - High security
 - Sharing / updates not as easy
- Other solutions explored: Azure app service site

. 2	202	Rev	enue	Tuiti	on	2		Τι	uiti Tui	ition - N	ew	Dep	ot.		2020)	200	-20-1 1	0		
/			Expe	nse	Pay		3			Part T						2020	C	130-1	0-30	00	
		202	Keve	nue	Tuition		2			Tuitio	n - N	lew	De	ept.		2020	C	200-2	20-1	10	
			Exp	bense	Pay		3			^{Uy} Par	t Tim	he F	ac					2	200		1.20
			Rev	venue	Tuitio	on	2			Tuiti	ion -	- Ne	у Г У Т	ort Tim		ліу г	- ay		202		130
0				∠ 3					т: т.		J L			uition - Part Ti					202	2020	200
3			у 	5			V	vna		usec)					-	У			1
2			lion	2	0			h	e lik	<e< td=""><td></td><td></td><td></td><td>Tuitior</td><td></td><td></td><td></td><td>-</td><td></td><td>2020</td><td>2</td></e<>				Tuitior				-		2020	2
	3))	/	3									P	art Tim	ie Fc	acult	y Pay		2	020
	2				100	ŚŚ	2	ŚŚŚ	-	Pay			3	Τι	- vition	Nev	N De	ept.		2	020
		3								uiti			2		Part T	ime	Fac	ulty Po	y		202
n		2		Ś, Ś,	SS SS		222	ŚŚŚ	22	ŚŚŚ	DI		2	2	Tuition	n - N	ew l	Dent.			202
Pay			2020	•	- <u>10-</u> 5 \$3 \$5	ŚŚ		ŚŚŚ	;	śśś		2		Part Tir	ne Fac	culty	' Pay	/	2	020	13
r,			2020		-20-11			T		0				Jition	- New	Dep	ot.		2	020	20
V Pc	De	- 		-				Tuitio		2	4				ŚŚŚ			^		20)
				culty P			2020	100-1	0-000	Ś. SSS			22	2	222					20)
				v Dept.		2	2020	200-2	20-110	222	Ś	ŚŚ		ŚŚ	Ś	Ś	sis				2020
				-aculty			2020	130)-10-30)0 ŠŠŠ	Ś	ŚŚ		ŚŚ	Ś	Ś	sisi				2020
N De	Pr 1	luitio	on - Ne	ew Dep	ot.		2020		-20-1						<u> </u>		-				
Fac	ulty	/ Pc	Part Ti	me Fa	culty Pa	ау		2020	130-	10-300		Rev	ven		uition		2	4			20
	_												. –								2



What it's like now!

AE Financial Code Matcher	—	×
Upload financial file as Excel (.xl	lsx or .xls)	
Browse		
Data_Initial_Financial_File_blank	c2020.xlsx	
Find Matches Done! Elapsed time: 6 seco	onds	
Save File		