

Uno Pasadhika
Backend Developer



Alan Tan

Designer



Andrew Wang
Backend Developer



Kevin Wu
Frontend Developer

#### Find the Perfect CC Course

Data sourced from Assist.org and CVC.edu

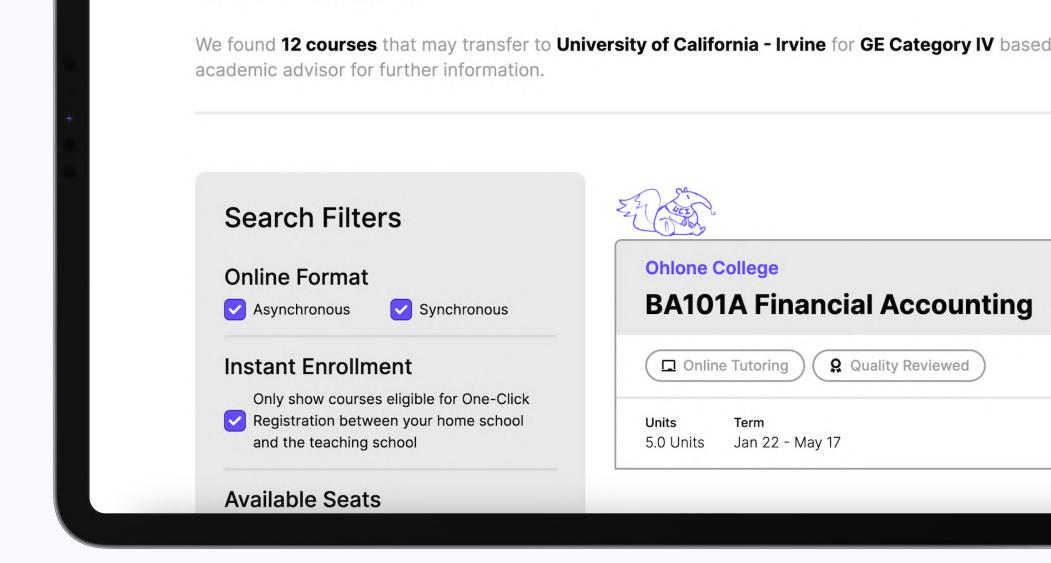
University of California -... 

GE IA

Search Q

Date

November 2023



Our mission —

## Increase access to community college resources and data



## Community Colleges with UCl Articulation Agreements

10,591

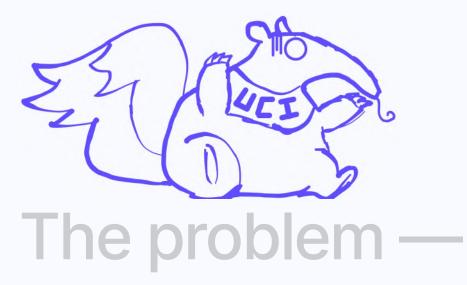
**UCI Articulation Agreements** 

57%

Of Community Colleges Offer Online Courses







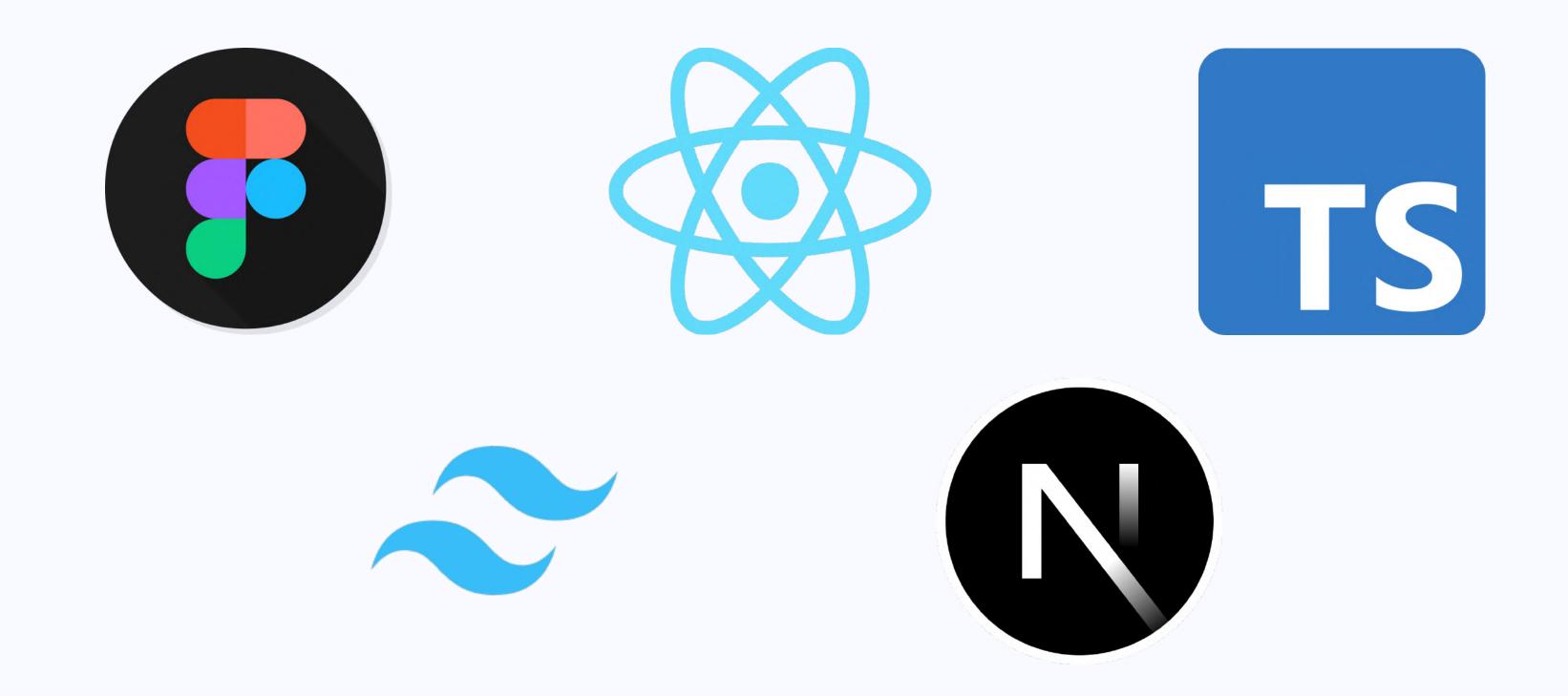
# Finding articulatable community college courses is not easy





## Existing tools are designed for transferring





#### **Frontend Tech Stack**

Figma, React, Next.js 13, Typescript, Tailwind CSS





#### **Backend Tech Stack**



Node.js, Python, Flask, OpenCV, Tesseract, SQLite, Cheerio, AWS



# PDFs are hard to parse



# seriously unieasy.



PDFs are tough!

## PDFs are unstructured—

designed for **human** readability, not **machine** 



PyPDF2



#### VIAJOR PREPARATION COURSES REQUIRED FOR TRANSFER **I&C SCI 31** - Introduction to Programming (4.00) CS 37 - C++ Programming (3.00) --- And ---I&C SCI 32 - Programming with Software Libraries (4.00) CS 41 - Data Structures (3.00) --- And ---I&C SCI 33 - Intermediate Programming (4.00) Please refer to additional important General Information section above CS 10 - Introduction to Programming Using Python (3.00) Articulates with the first two courses in the series only Courses must be completed in this order MATH 2A - Single-Variable Calculus (4.00) MATH 3A - Analytic Geometry and Calculus I (5.00) MATH 3AH - Analytic Geometry and Calculus I Honors (5.00) MATH 2B - Single-Variable Calculus (4.00) ← MATH 3B - Analytic Geometry and Calculus II (5.00) --- Or ---MATH 3BH - Analytic Geometry and Calculus II Honors (5.00) One additional approved transferable course for the major (an ← No Course Articulated approved Math, Science, or CSE course): Please refer to additional important General Information

#### ONE ADDITIONAL APPROVED TRANSFERABLE COURSE FOR THE MAJOR (MATH OR CS COURSE)

#### \*\*REFER TO TOP OF AGREEMENT\*\*

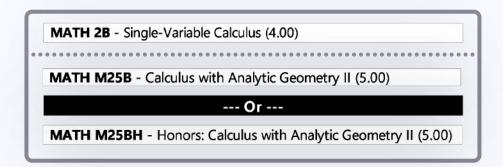
MATH 3A - Introduction to Linear Algebra (4.00)	$\leftarrow$	MATH 26 - Introduction to Linear Algebra (4.00)	
	Or -	r	
I&C SCI 6N - Computational Linear Algebra (4.00)	<b>←</b>	No Course Articulated	
<b>I&amp;C SCI 6B</b> - Boolean Logic and Discrete Structures (4.00)	←	MATH 31 - Computer Discrete Mathematics II (3.00) Same-As: CS 6B	
<b>I&amp;C SCI 6D</b> - Discrete Mathematics for Computer Science (4.00)	←	MATH 30 - Computer Discrete Mathematics I (3.00) Same-As: CS 6A	
<b>1&amp;C SCI 45C</b> - Programming in C/C++ as a Second Language (4.00)	$\leftarrow$	No Course Articulated	
1&C SCI 46 - Data Structure Implementation and Analysis (4.00)	$\leftarrow$	No Course Articulated	
<b>I&amp;C SCI 51</b> - Introductory Computer Organization (6.00)	←	CS 40A - Computer Organization and Assembly Language I (3.00	
I&C SCI 53 - Principles in System Design (4.00)	_	CS 40B - Computer Organization and Assembly Language II (3.00  No Course Articulated	

### Creating structure where there was none

#### Assist.org PDF to Image



#### Recursive Articulation Sectioning

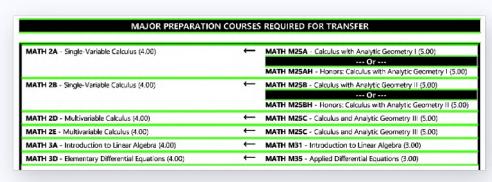


#### Text to JSON

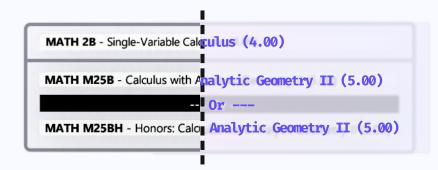
```
"from": [
    "MATH M25B",
    "MATH M25BH"
],
    "to": [
    "MATH 2B"
]
```



#### Binary Recoloring & OpenCV Edge Detection



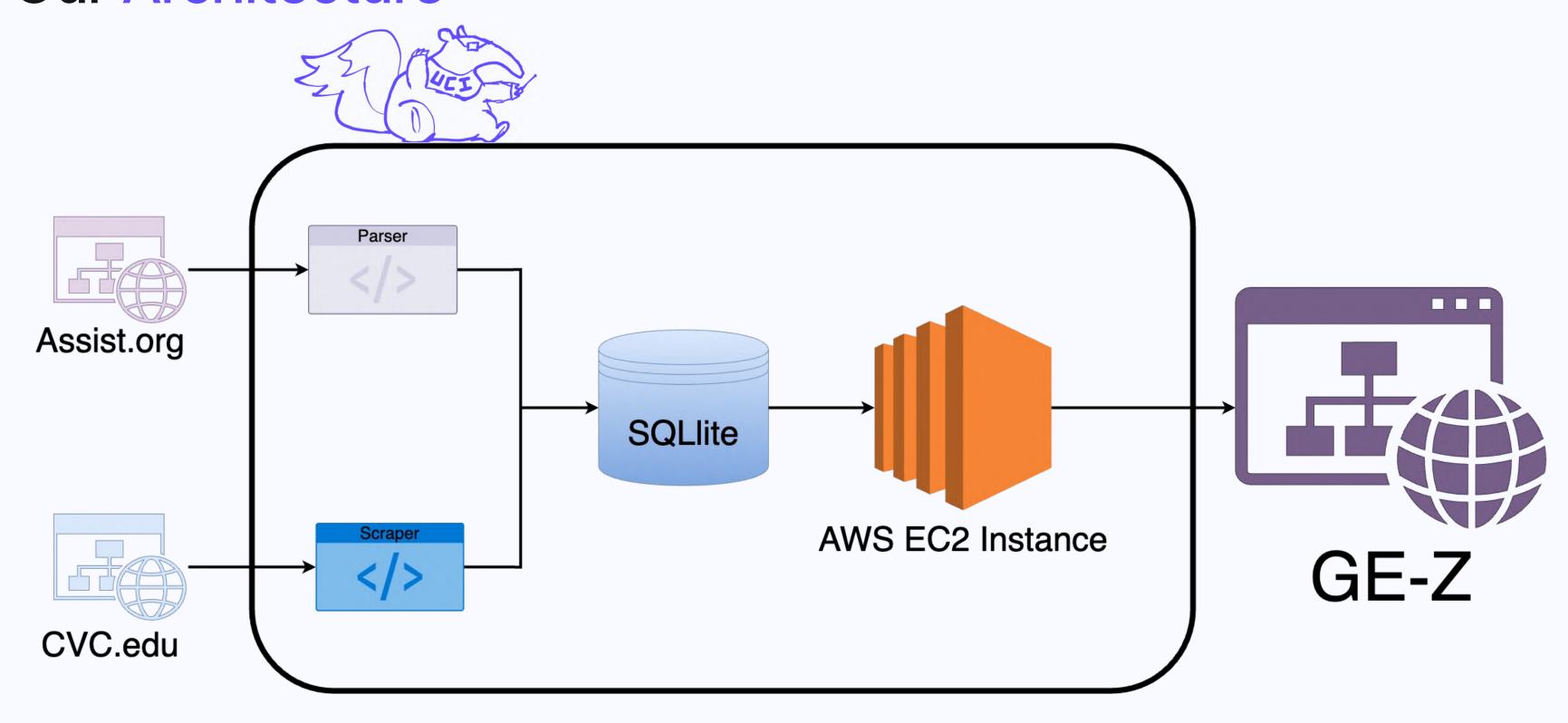
#### Tesseract Optical Character Recognition



#### Relational Database Population



#### **Our Architecture**

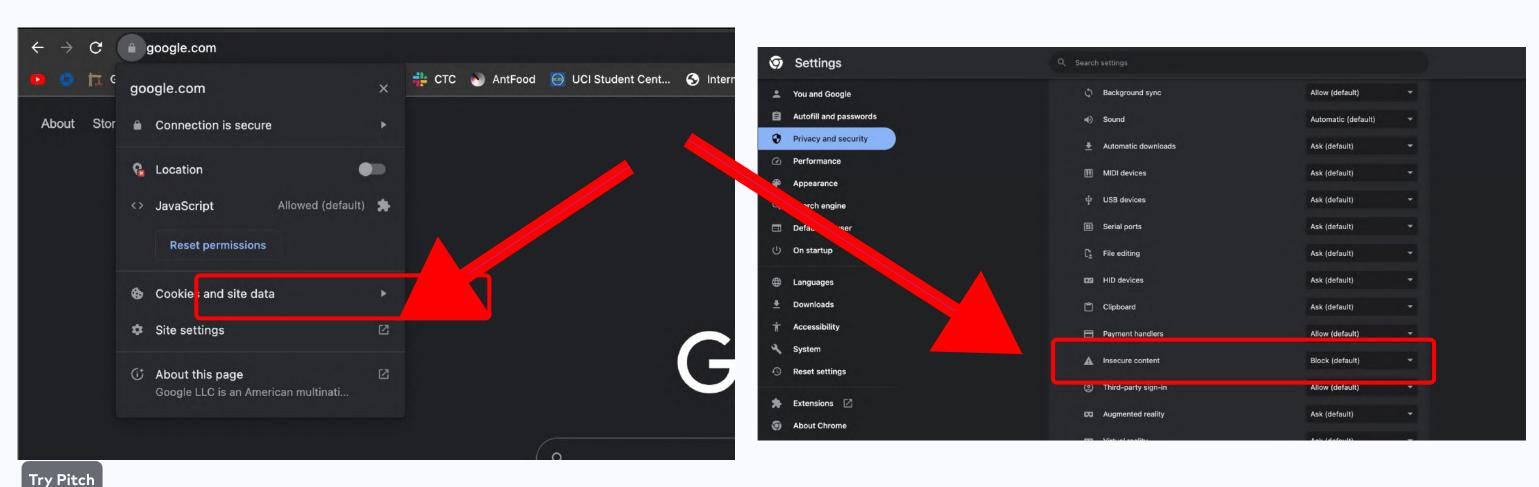


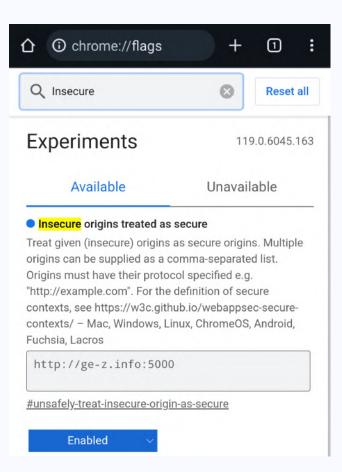
# Enough telling, time to demo!

### GE-Z.vercel.app



## \*\*with http allowed





### Demo Time:)

#### Find the Perfect CC Course

Data sourced from Assist.org and CVC.edu

University of California -... 🗸

GE IA

Search Q

Date

November 2024

# Thank You:)

