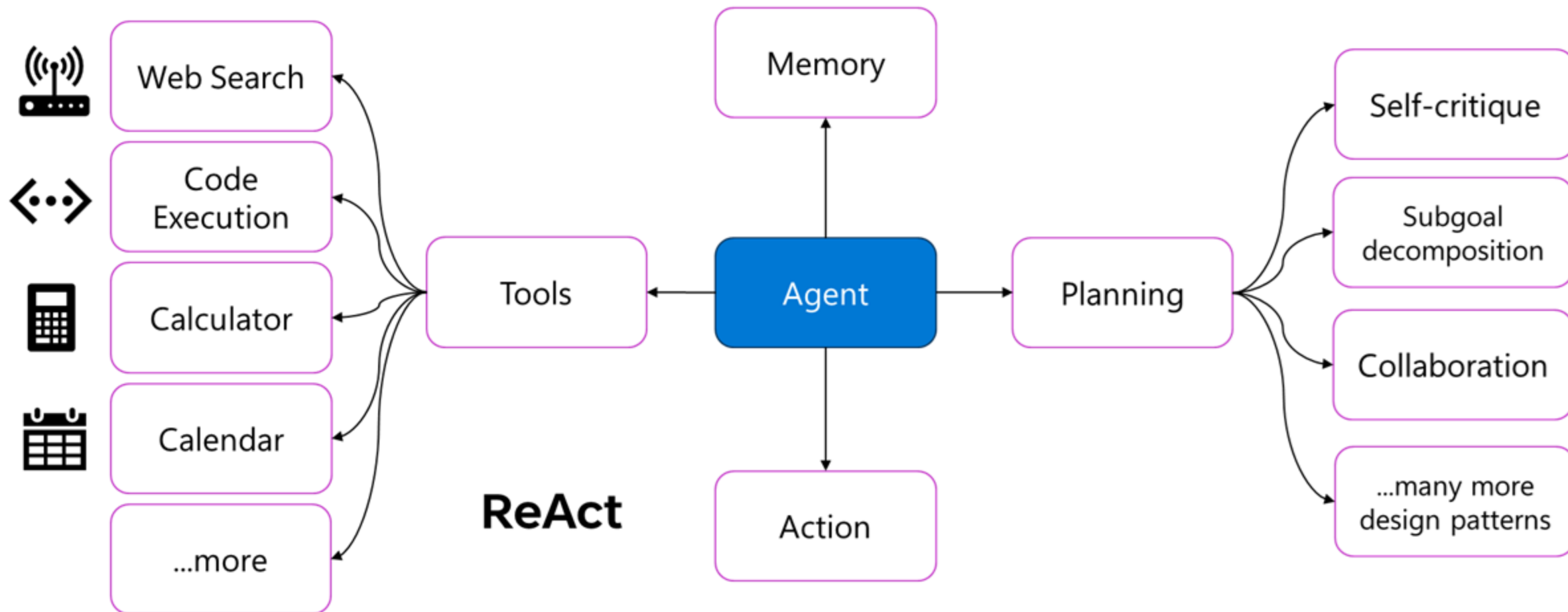
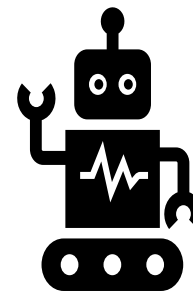


CMPE 280

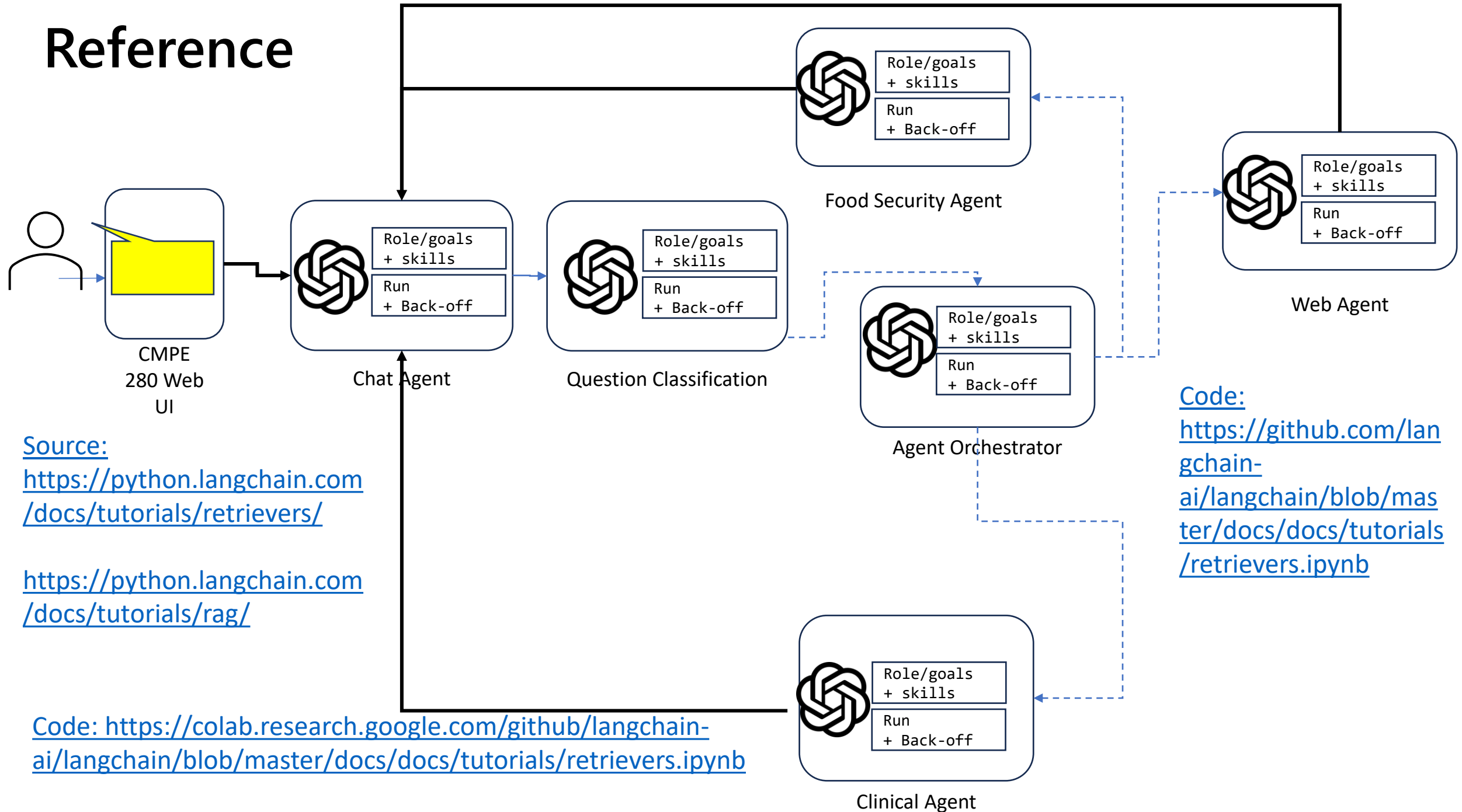
Web UI Copilots Hackathon

Professor: Chandrasekar Vuppalapati
Spring 2025

Agentic AI capabilities



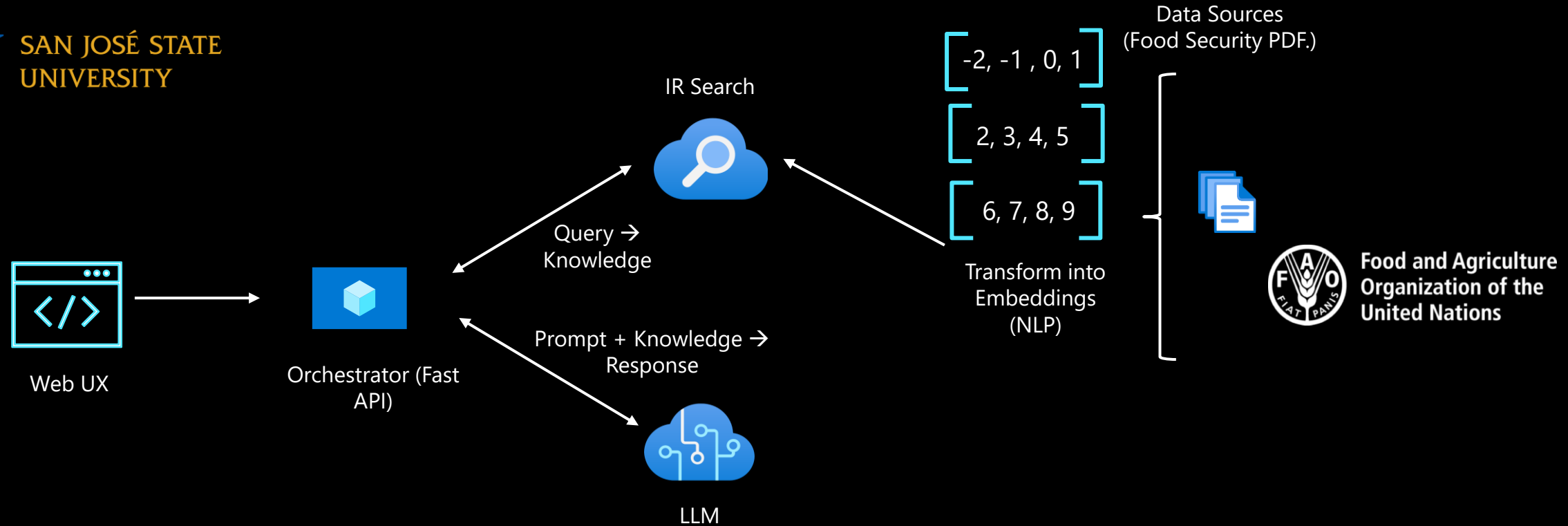
Reference



Web Copilots: Retrieval Augmented Generation

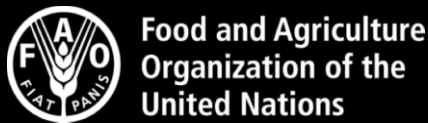
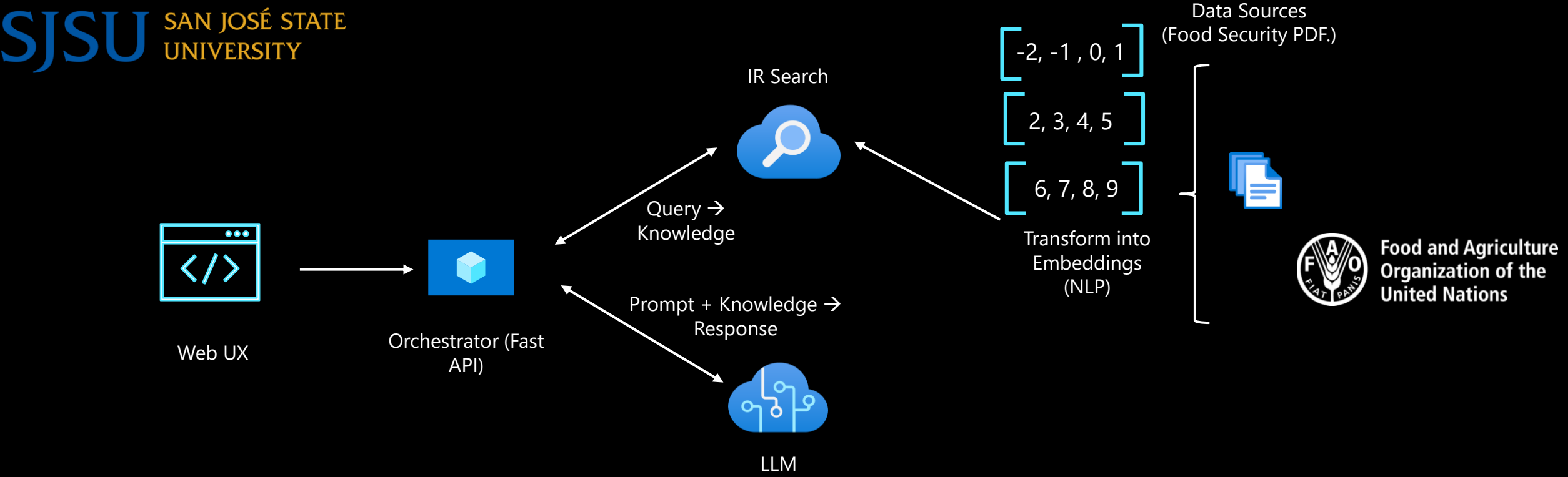
Food and Agriculture Organization of the United Nations – The State of Food Security and Nutrition in the World

SJSU SAN JOSÉ STATE UNIVERSITY



Mobile App : Retrieval Augmented Generation



Food and Agriculture Organization of the United Nations – The State of Food Security and Nutrition in the World






Web Copilots

Web Copilots

API Widget






Today


WorldBank GDP Growth API




California Reservoir IDs

Retrieve GASREGW Data FRED


Web UI Copilot











Ask anything



 Search




 Reason





Web Copilots

API Widget




Today

WorldBank GDP Growth API

California Reservoir IDs

Retrieve GASREGW Data FRED

Web UI Copilot





Prompts

Retrieve Average Price: Milk, Fresh, Whole, Fortified (Cost per Gallon/3.8 Liters) in U.S. City Average (APU0000709112) from 1992 to current date on Monthly Frequency with x-axis containing date and y-axis represents price of gas. The data has to be in time series in JSON format and ought contain full data.


Ask anything




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 Search

 Reason

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Web Copilots



Web Copilots

API Widget






Today

WorldBank GDP Growth API

California Reservoir IDs




Retrieve GASREGW Data FRED

Web UI Copilot


CV


Prompts


Top 10 Stocks of DOW with market percentages in JSON structure





Ask anything



 Search




 Reason





Web Copilots

API Widget

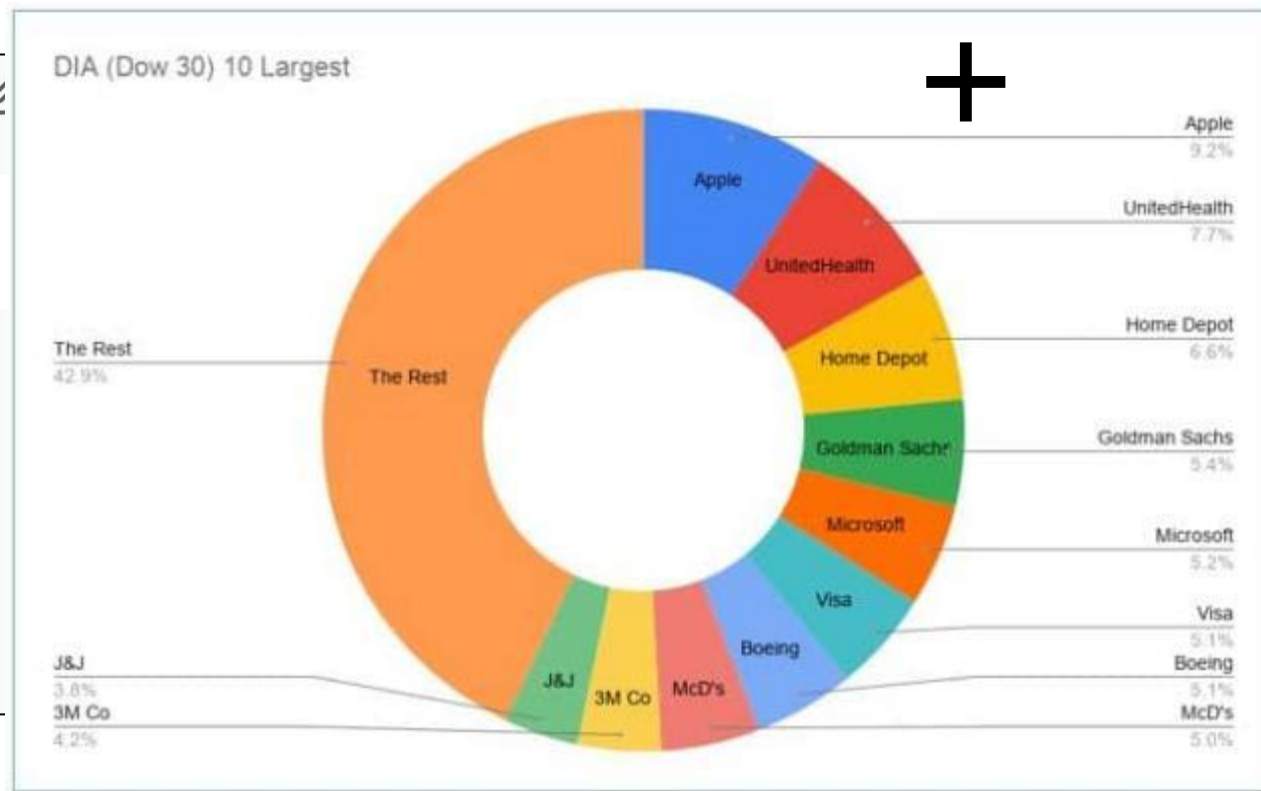


Today




WorldBank GDP Growth API


California Reservoir IDs

Retrieve GASREGW Data FRED



CV





Web Copilots

API Widget





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Web UI Copilot

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Prompts

List country and year of last 50 years of cricket world cup champions. Provider in JSON format.



Ask anything



 Search


 Reason





Web Copilots

API Widget





Today

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California Reservoir IDs

Retrieve GASREGW Data F





Web UI Copilot

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CV

Year	Country
2023	Australia
2019	England
2015	Australia
2011	India
2007	Australia

Search

Reason


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Web Copilots

API Widget






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WorldBank GDP Growth API

California Reservoir IDs


Retrieve GASREGW Data FRED

Web UI Copilot


CV

Prompts

List frequently asked data science and web UI interview questions? Format in JSON




Ask anything



 Search



 Reason





Web Copilots

API Widget





Today


WorldBank GDP Grow


California Reservoir ID

Retrieve GASREGW Da





Web UI Copilot





Data Science Interview Questions

Statistics & Probability	Explain the Central Limit Theorem.	 
	What is the difference between Type I and Type II errors?	
	What is p-value, and how do you interpret it?	
	Explain bias-variance tradeoff.	
Machine Learning	What are different types of probability distributions?	
	Explain the difference between supervised, unsupervised, and reinforcement learning.	
	How do you handle imbalanced datasets?	
	What is regularization in machine learning?	

Web Copilots

API Widget



GDP

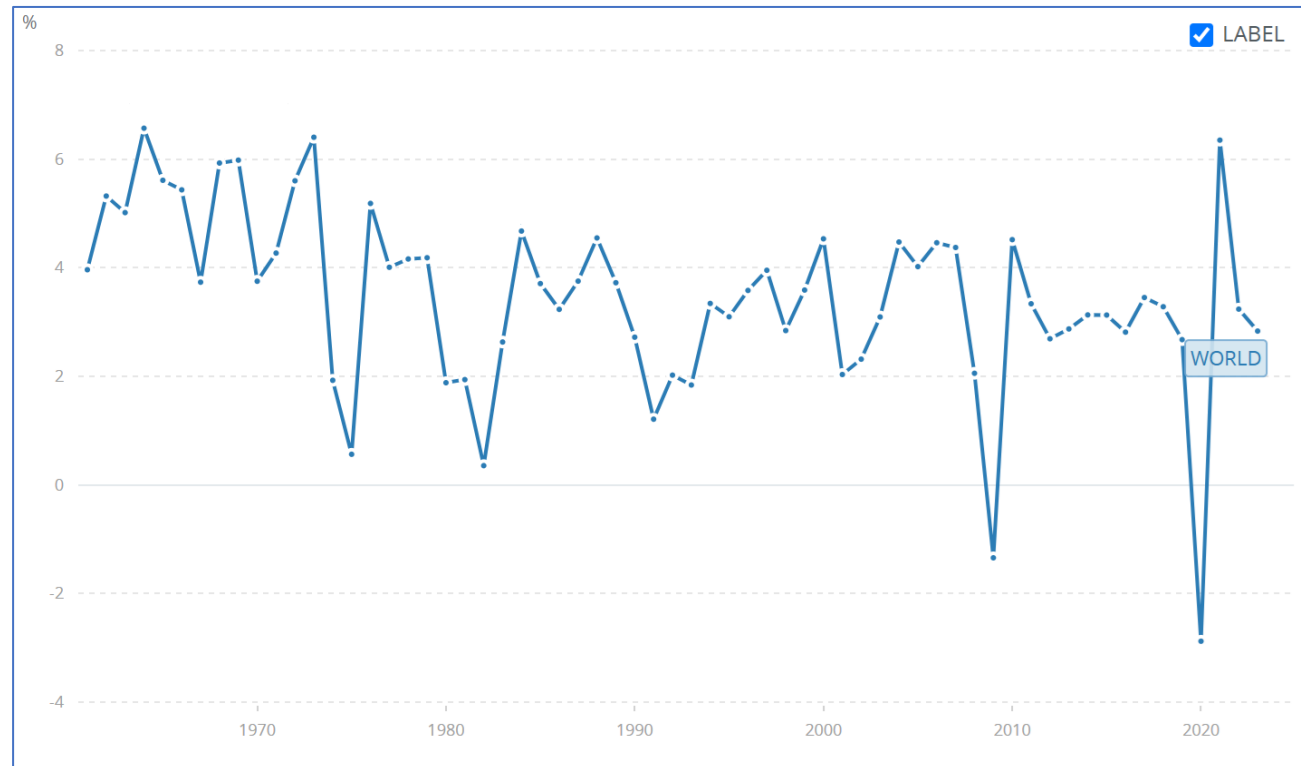
CO2

Agri. Land

Q Bank

GDP APIs

<https://api.worldbank.org/v2/country/WLD/indicator/NY.GDP.MKTP.KD.ZG?format=json>



API Widget



GDP

CO2

Agri. Land

Q Bank

Interview Question:

Local Database

Data Science Interview Questions

Statistics &
Probability

Explain the Central Limit Theorem.

What is the difference between Type I and Type II errors?

What is p-value, and how do you interpret it?

Explain bias-variance tradeoff.

What are different types of probability distributions?

Machine Learning

Explain the difference between supervised, unsupervised, and reinforcement learning.

How do you handle imbalanced datasets?

What is regularization in machine learning?

Web Copilots

API Widget



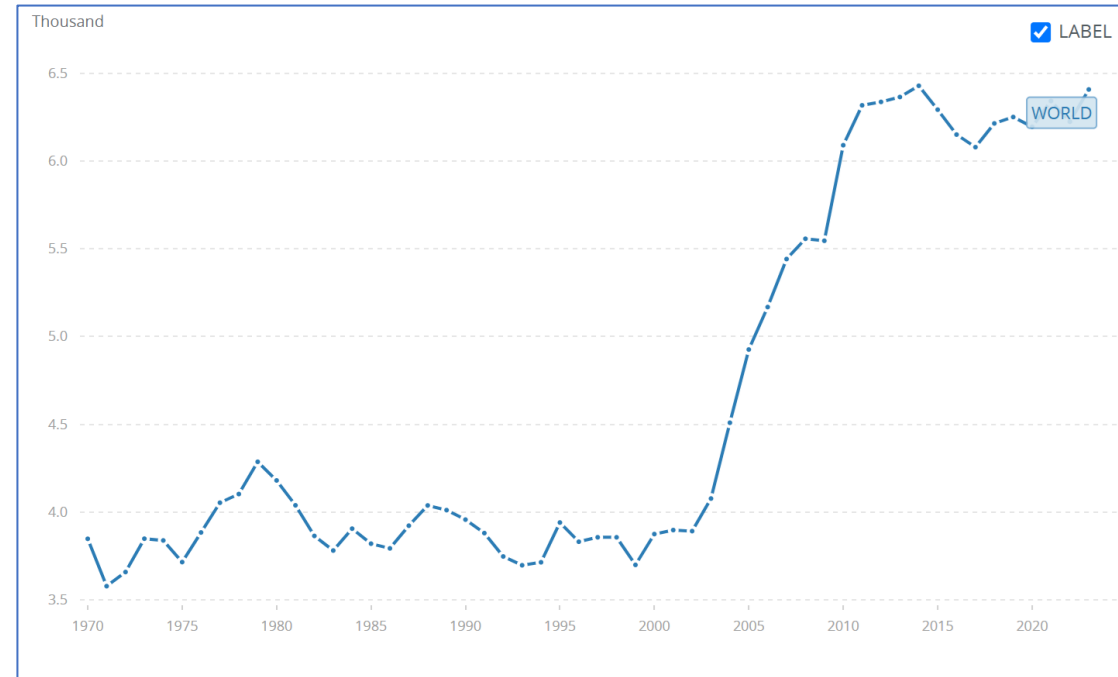
GDP

CO2

Agri. Land

CO2 APIs

<https://api.worldbank.org/v2/country/WLD/indicator/EN.GHG.CO2.AG.MT.CE.AR5?format=json>



Web Copilots

API Widget



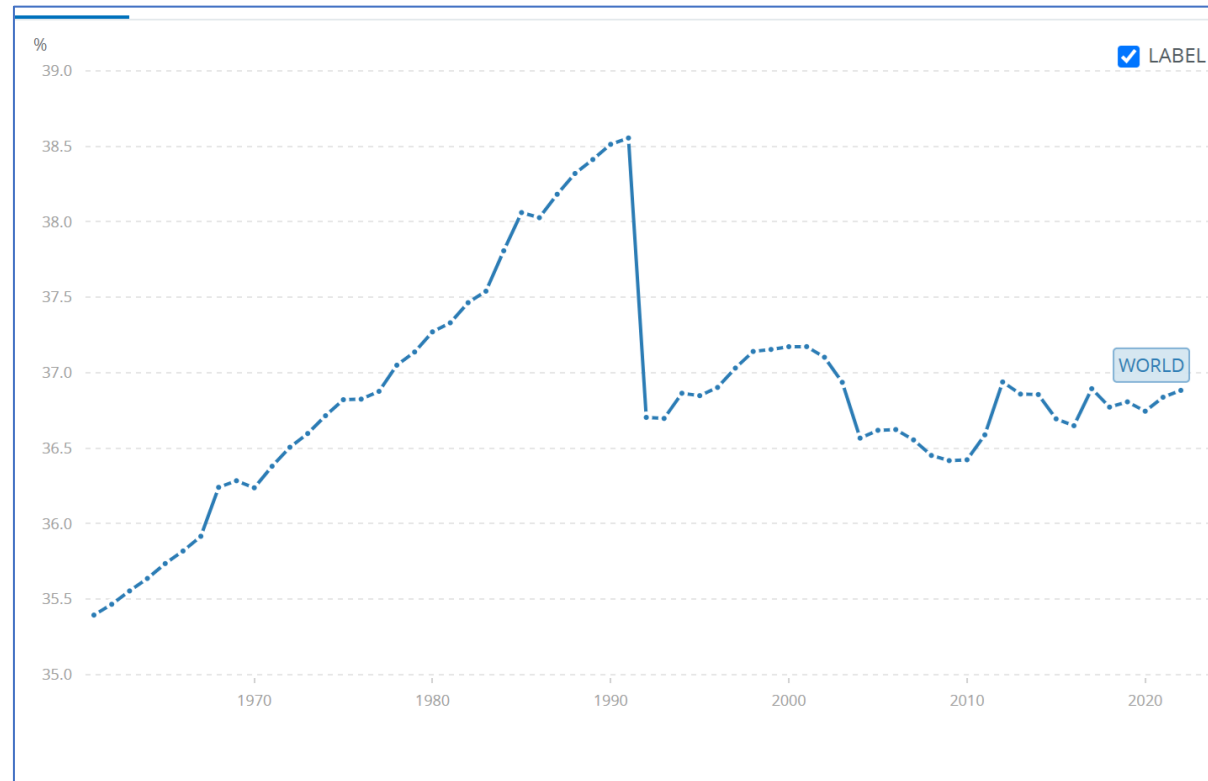
GDP

CO2

Agri. Land

Agri Land API

<https://api.worldbank.org/v2/country/WLD/indicator/AG.LND.AG.RI.ZS?format=json>





Food and Agriculture
Organization of the
United Nations



World Health
Organization

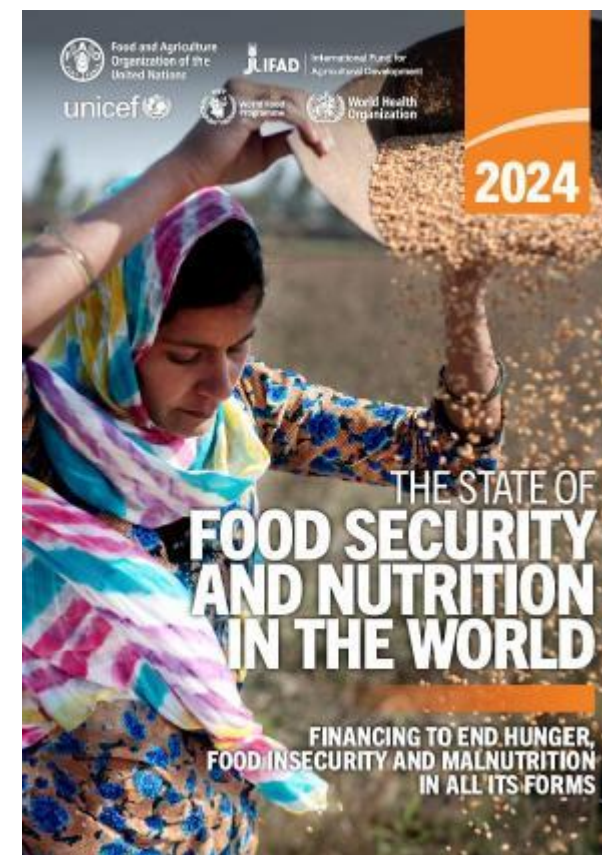
Web Copilots



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Six years from 2030, hunger and food insecurity trends are not yet moving in the right direction to end hunger and food insecurity (SDG Target 2.1) by 2030. The indicators of progress towards global nutrition targets similarly show that the world is not on track to eliminate all forms of malnutrition (SDG Target 2.2). Billions of people still lack access to nutritious, safe and sufficient food. Nevertheless, progress in many countries provides hope of the possibility of getting back on track towards hunger and malnutrition eradication. Implementing the policies, investments and legislation needed to revert the current trends of hunger, food insecurity and malnutrition requires proper financing for food security and nutrition. Despite a broad agreement on the urgent need to increase financing for food security and nutrition, the same cannot be said for a common understanding regarding how this financing should be defined and tracked. The report provides a long-awaited definition of financing for food security and nutrition and guidance for its implementation. There are recommendations regarding the efficient use of innovative financing tools and reforms to the food security and nutrition financing architecture. Establishing a common definition of financing for food security and nutrition, and methods for its tracking, measurement and implementation, is an important first step towards sustainably increasing the financing flows needed to end hunger, food insecurity and all forms of malnutrition, and to ensure access to healthy diets for all, today and tomorrow.

Source: <https://www.fao.org/publications/home/fao-flagship-publications/the-state-of-food-security-and-nutrition-in-the-world/en>
<https://data.unicef.org/resources/sofi-2023/>





Food and Agriculture
Organization of the
United Nations



World Health
Organization

Web Copilots

unicef 

SJSU SAN JOSÉ STATE
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In an increasingly urbanized world grappling with the aftermath of a global pandemic and major geopolitical conflicts, our global food systems face unprecedented challenges. The State of Food Security and Nutrition in the World 2023, launched on 12 July 2023, provides a comprehensive overview of these complexities. This report captures the state of global hunger, malnutrition, and the rapidly changing dynamics of food security. Urbanization, once thought to blur the lines between rural and urban food accessibility, is now drastically reshaping food systems and affecting the availability and affordability of healthy diets.



Source: <https://www.fao.org/publications/home/fao-flagship-publications/the-state-of-food-security-and-nutrition-in-the-world/en>

<https://data.unicef.org/resources/sofi-2023/>


Clinical Researcher

Web Copilots

Prompts

Provide all sites for Heart Attack.

API Widget




Today

WorldBank GDP Growth API

California Reservoir IDs

Retrieve GASREGW Data FRED


Web UI Copilot

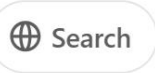



Prompts


Provide all sites for Heart Attack.


Ask anything





 Search


 Reason












Web Copilots

Prompts

Provide all sites for Heart Attack.

API Widget



Today

WorldBank GDP Growth API

California Reservoir IDs

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Study Title	NCT Number	Status	Conditions	Interventions
Follow up of Adults With Congenitally Malformed Hearts With Focus on Computer-Based Education and Psychosocial Support	NCT01234753	Completed	<ul style="list-style-type: none">Adults With Congenitally Malformed Hearts	<ul style="list-style-type: none">Other: Physician and nurse
Intracardiac Hemodynamics and Myocardial Strain in Athletes and First Responders	NCT06075342	Completed	<ul style="list-style-type: none">Cardiac Structure and FunctionIntracardiac Hemodynamic	<ul style="list-style-type: none">Behavioral: exercise

CV



Web Copilots

Prompts

Provide all sites for Heart Attack.


The screenshot displays the Web UI Copilot interface. On the left sidebar, there is a section titled "API Widget" with three icons: a sun over waves, a globe, and a factory. Below this, under the heading "Today", are four API suggestions: "WorldBank GDP Growth API", "California Reservoir IDs", and "Retrieve GASREGW Data FRED". The main chat area is titled "ChatGPT" with a dropdown arrow. Below this is a blue button labeled "Web UI Copilot" next to a pilot icon. Underneath, the word "Prompts" is underlined, followed by the text "Provide all sites where COVID clinical trials are active and list all countries." At the bottom, there is a large input box with the placeholder text "Ask anything". Below the input box are four buttons: a plus sign, a globe labeled "Search", a lightbulb labeled "Reason", and a three-dot menu. To the right of the input box are icons for a presentation screen, a thumbs up, and a thumbs down. A yellow circular icon with "CV" is in the top right corner.

Mobile Copilot Clinical Researcher

Prompts


Provide all sites for Heart Attack.

Web UI Copilot



API Widget

Explore GPTs




WorldBank GDP Growth API

California Reservoir IDs

Retrieve GASREGW Data FRED

United StatesBrazilUnited KingdomWorld Health Organization (WHO)+4The Guardian+4ecrin.org+4GermanyFrancecovid19-trials.comChinaThe GuardianIndiaAustraliaSouth AfricaJapanCanadaSpainItalyRussiaMexicoSouth KoreaArgentinavox.com+4WIRED+4World Health Organization (WHO)+4TurkeyEgyptIran

CV



Questions?