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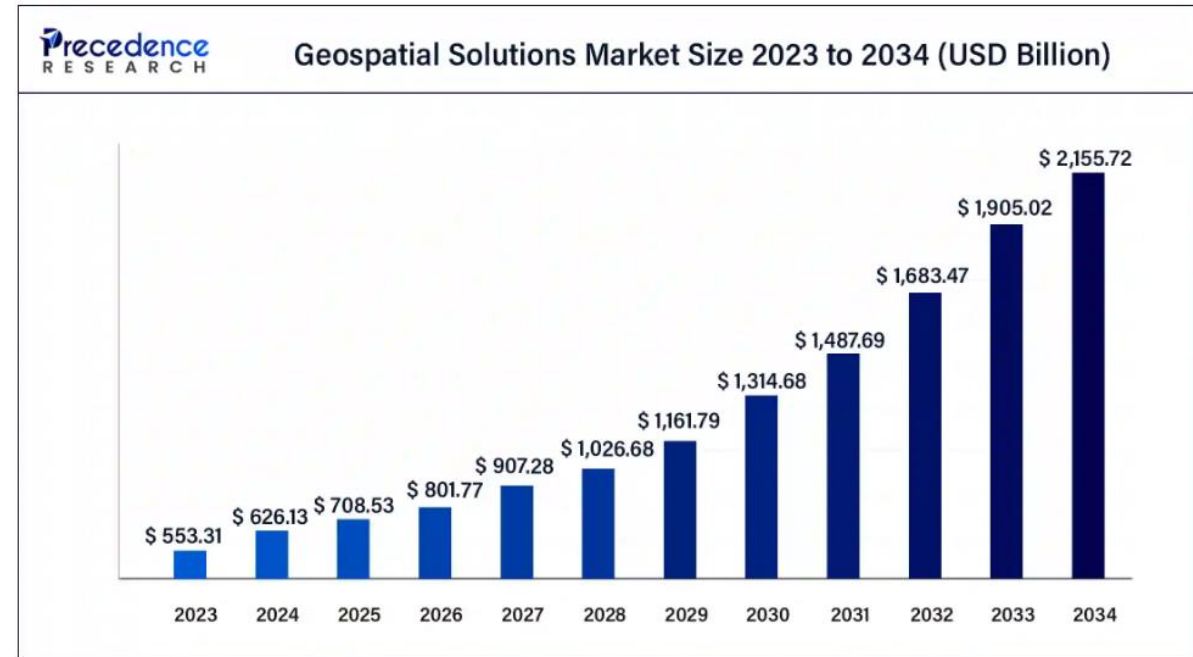
Open-Source Geospatial

Powering Ecosystems for a Sustainable Future

Dr Yiqun Chen
The University of Melbourne

The global geospatial solutions market size is expected to grow from **708b in 2025** to **2,155b by 2034**.

It is expanding at a double-digit CAGR (Compound Annual Growth Rate) of **13.16%** for the next decade.



Source: <https://www.precedenceresearch.com/geospatial-solutions-market>

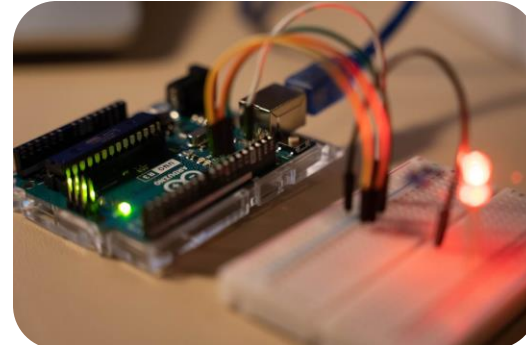
Explosion of geospatial data sources



Remote Sensing Satellites



Drones & LiDAR



IoT Sensor Network



Mobile Devices

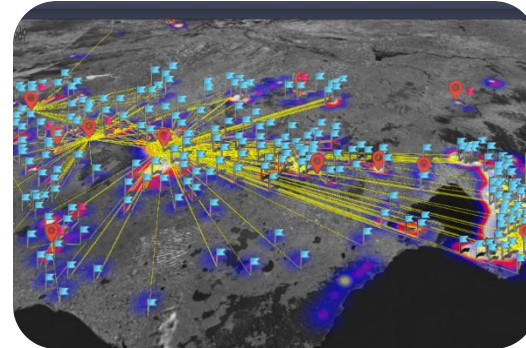
Adoption and integration with emerging technologies



Agentic AI-Driven
GIS Workflows



3D Real Scene &
Digital Twin Ecosystem



Dynamic Modeling &
Real-time Decision Support



Advanced Visualization
with VR, AR and MR

Geospatial Market Providers



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SOLUTION PROVIDERS



SERVICE PROVIDERS



TECHNOLOGY PROVIDERS



TOOLS PROVIDERS



A Brief History of Open-Source



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GNU Project
initiated



OSI
founded



GitHub
launched



1950-1970

1983

1991

1998

1999

2008

2010-2020

The concept of open-source dates back to the early days of computing...



Release of
Linux



Apache
Software
Foundation

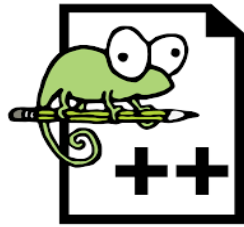


Open-source
became
mainstream

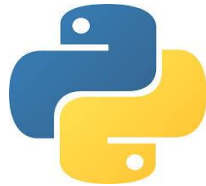
A Thriving Open-Source Market



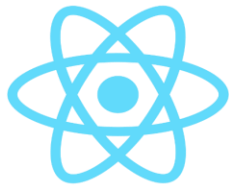
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Apache



PostgreSQL



PostgreSQL



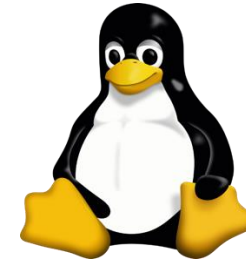
deepseek



PostGIS



TensorFlow



kafka



“Over **two-thirds** of organizations reported using open-source software in 2019, more than **three-quarters** of organizations surveyed did so in 2021 and 2023.

Of the large companies with more than 2,000 employees, as many as **85%** said they will actively use open-source software.

It has also established itself in public administration: **59%** of the authorities surveyed use open-source software.”



Myth #1: “Proprietary Platforms Provide Better User Support”

“Proprietary platform vendors promise 24/7 client support which comes at a cost... open-source software relies on community support, which means that the responsiveness and reliability of support can vary.”

Myth #2: “Proprietary Is More Secure Than Open Source”

“The unpopular truth is that proprietary platforms are every bit as vulnerable to attacks as their open-source counterparts, if not more so.”

Myth #3: “Proprietary Costs More, So You Get More Value”

“In truth, there is no difference in quality between open source and proprietary software. It all depends on the quality of workmanship that goes into building the software.”

Source: <https://evolvingweb.com/blog/open-source-vs-proprietary-software-3-common-myths-busted>

Source: <https://www.iscripts.com/blog/open-source-vs-proprietary-software-choosing-the-right-option-for-your-business/>



Founded in 2006, the Open-Source Geospatial Foundation (OSGeo) is a not-for-profit organization whose mission is to foster global adoption of **open geospatial technology** by being an inclusive software foundation devoted to an open philosophy and participatory community driven development.

OSGeo Vision

Empower everyone with open source geospatial

FOSS4G Software Stack

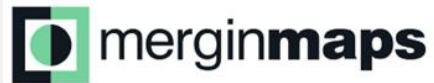
Free and Open-Source Software for Geospatial



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Desktop & Mobile



Geoparazzi

GIS Server



Geo Database



PostgreSQL



Geo Visualisation



Libraries



JTS Topology Suite



Build Open-Source Geospatial Ecosystems



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