Import libraries

```
In [1]:  import requests
         from bs4 import BeautifulSoup
```

```
In [25]:  # Fetch the Wikipedia page
          url = "https://en.wikipedia.org/wiki/DeepSeek_(chatbot)"
          response = requests.get(url)
```

```
In [27]:  soup = BeautifulSoup(response.content, "html.parser")
          print (soup)
```

```html
<!DOCTYPE html>

<html class="client-nojs vector-feature-language-in-header-enabled vector-feature-la
nguage-in-main-page-header-disabled vector-feature-page-tools-pinned-disabled vector
-feature-toc-pinned-clientpref-1 vector-feature-main-menu-pinned-disabled vector-fea
ture-limited-width-clientpref-1 vector-feature-limited-width-content-enabled vector-
feature-custom-font-size-clientpref-1 vector-feature-appearance-pinned-clientpref-1
vector-feature-night-mode-enabled skin-theme-clientpref-day vector-sticky-header-ena
bled vector-toc-available" dir="ltr" lang="en">
<head>
<meta charset="utf-8"/>
<title>DeepSeek (chatbot) - Wikipedia</title>
<script>(function(){var className="client-js vector-feature-language-in-header-enabl
ed vector-feature-language-in-main-page-header-disabled vector-feature-page-tools-pi
nned-disabled vector-feature-toc-pinned-clientpref-1 vector-feature-main-menu-pinned
-disabled vector-feature-limited-width-clientpref-1 vector-feature-limited-width-con
tent-enabled vector-feature-custom-font-size-clientpref-1 vector-feature-appearance-
pinned-clientpref-1 vector-feature-night-mode-enabled skin-theme-clientpref-day vect
or-sticky-header-enabled vector-toc-available";var cookie=document.cookie.match(/(?:
^|; )enwikimwclientpreferences=([^;]+)/);if(cookie){cookie[1].split('%2C').forEach(f
unction(pref){className=className.replace(new RegExp('(^| )'+pref.replace(/-clientpr
ef-\w+$|[^\w-]+/g,'')+'-clientpref-\\w+( |$)'),'$1'+pref+'$2');});}document.document
Element.className=className;}());RLCONF={"wgBreakFrames":false,"wgSeparatorTransform
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ames":["","January","February","March","April","May","June","July","August","Septemb
er","October","November","December"],"wgRequestId":"ff2550b2-3672-4cc7-ba6a-402208b5
5e8f","wgCanonicalNamespace":"","wgCanonicalSpecialPageName":false,"wgNamespaceNumbe
r":0,"wgPageName":"DeepSeek_(chatbot)","wgTitle":"DeepSeek (chatbot)","wgCurRevision
Id":1288447648,"wgRevisionId":1288447648,"wgArticleId":79122294,"wgIsArticle":tru
e,"wgIsRedirect":false,"wgAction":"view","wgUserName":null,"wgUserGroups":["*"],"wgC
ategories":["Articles containing simplified Chinese-language text","CS1 Korean-langu
age sources (ko)","Articles with short description","Short description is different
from Wikidata","Use dmy dates from February 2025","2025 software","Chatbots","Genera
tive pre-trained transformers","Interactive narrative","2025 in artificial intellige
nce"],"wgPageViewLanguage":"en","wgPageContentLanguage":"en","wgPageContentModel":"w
ikitext","wgRelevantPageName":"DeepSeek_(chatbot)","wgRelevantArticleId":79122294,"w
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y":true},"wgWMESchemaEditAttemptStepOversample":false,"wgWMEPageLength":50000,"wgEdi
tSubmitButtonLabelPublish":true,"wgULSPosition":"interlanguage","wgULSisCompactLinks
Enabled":false,"wgVector2022LanguageInHeader":true,"wgULSisLanguageSelectorEmpty":fa
lse,"wgWikibaseItemId":"Q132324293","wgCheckUserClientHintsHeadersJsApi":["brand
s","architecture","bitness","fullVersionList","mobile","model","platform","platformV
ersion"],"GEHomepageSuggestedEditsEnableTopics":true,"wgGETopicsMatchModeEnabled":fa
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RLSTATE={"ext.globalCssJs.user.styles":"ready","site.styles":"ready","user.style
s":"ready","ext.globalCssJs.user":"ready","user":"ready","user.options":"loading","e
xt.cite.styles":"ready","skins.vector.search.codex.styles":"ready","skins.vector.sty
les":"ready","skins.vector.icons":"ready","jquery.makeCollapsible.styles":"ready","e
xt.wikimediamessages.styles":"ready","ext.visualEditor.desktopArticleTarget.noscrip
t":"ready","ext.uls.interlanguage":"ready","wikibase.client.init":"ready","ext.wikim
ediaBadges":"ready"};RLPAGEMODULES=["ext.cite.ux-enhancements","mediawiki.page.medi
```

```
a","site","mediawiki.page.ready","jquery.makeCollapsible","mediawiki.toc","skins.vec
tor.js","ext.centralNotice.geoIP","ext.centralNotice.startUp","ext.gadget.ReferenceT
ooltips","ext.gadget.switcher","ext.urlShortener.toolbar","ext.centralauth.centralau
tologin","mmv.bootstrap","ext.popups","ext.visualEditor.desktopArticleTarget.ini
t","ext.visualEditor.targetLoader","ext.echo.centralauth","ext.eventLogging","ext.wi
kimediaEvents","ext.navigationTiming","ext.uls.interface","ext.cx.eventlogging.campa
igns","ext.cx.uls.quick.actions","wikibase.client.vector-2022","ext.checkUser.client
Hints","ext.quicksurveys.init","ext.growthExperiments.SuggestedEditSession"];</scrip
t>
<script>(RLQ=window.RLQ||[]).push(function(){mw.loader.impl(function(){return["user.
options@12s5i",function($,jQuery,require,module){mw.user.tokens.set({"patrolToke
n":"+\\","watchToken":"+\\","csrfToken":"+\\"});
}];});});</script>
<link href="/w/load.php?lang=en&amp;modules=ext.cite.styles%7Cext.uls.interlanguage%
7Cext.visualEditor.desktopArticleTarget.noscript%7Cext.wikimediaBadges%7Cext.wikimed
iamessages.styles%7Cjquery.makeCollapsible.styles%7Cskins.vector.icons%2Cstyles%7Csk
ins.vector.search.codex.styles%7Cwikibase.client.init&amp;only=styles&amp;skin=vecto
r-2022" rel="stylesheet"/>
<script async="" src="/w/load.php?lang=en&amp;modules=startup&amp;only=scripts&amp;r
aw=1&amp;skin=vector-2022"></script>
<meta content="" name="ResourceLoaderDynamicStyles"/>
<link href="/w/load.php?lang=en&amp;modules=site.styles&amp;only=styles&amp;skin=vec
tor-2022" rel="stylesheet"/>
<meta content="MediaWiki 1.44.0-wmf.27" name="generator"/>
<meta content="origin" name="referrer"/>
<meta content="origin-when-cross-origin" name="referrer"/>
<meta content="max-image-preview:standard" name="robots"/>
<meta content="telephone=no" name="format-detection"/>
<meta content="width=1120" name="viewport"/>
<meta content="DeepSeek (chatbot) - Wikipedia" property="og:title"/>
<meta content="website" property="og:type"/>
<link href="//upload.wikimedia.org" rel="preconnect"/>
<link href="//en.m.wikipedia.org/wiki/DeepSeek_(chatbot)" media="only screen and (ma
x-width: 640px)" rel="alternate"/>
<link href="/w/index.php?title=DeepSeek_(chatbot)&amp;action=edit" rel="alternate" t
itle="Edit this page" type="application/x-wiki"/>
<link href="/static/apple-touch/wikipedia.png" rel="apple-touch-icon"/>
<link href="/static/favicon/wikipedia.ico" rel="icon"/>
<link href="/w/rest.php/v1/search" rel="search" title="Wikipedia (en)" type="applica
tion/opensearchdescription+xml"/>
<link href="//en.wikipedia.org/w/api.php?action=rsd" rel="EditURI" type="applicatio
n/rsd+xml"/>
<link href="https://en.wikipedia.org/wiki/DeepSeek_(chatbot)" rel="canonical"/>
<link href="https://creativecommons.org/licenses/by-sa/4.0/deed.en" rel="license"/>
<link href="/w/index.php?title=Special:RecentChanges&amp;feed=atom" rel="alternate"
title="Wikipedia Atom feed" type="application/atom+xml"/>
<link href="//meta.wikimedia.org" rel="dns-prefetch">
<link href="auth.wikimedia.org" rel="dns-prefetch"/>
</link></head>
<body class="skin--responsive skin-vector skin-vector-search-vue mediawiki ltr sited
ir-ltr mw-hide-empty-elt ns-0 ns-subject mw-editable page-DeepSeek_chatbot rootpage-
DeepSeek_chatbot skin-vector-2022 action-view"><a class="mw-jump-link" href="#bodyCo
ntent">Jump to content</a>
<div class="vector-header-container">
<header class="vector-header mw-header vector-feature-custom-font-size-clientpref--e
xcluded">
```

```
<div class="vector-header-start">
<nav aria-label="Site" class="vector-main-menu-landmark">
<div class="vector-dropdown vector-main-menu-dropdown vector-button-flush-left vecto
r-button-flush-right" id="vector-main-menu-dropdown" title="Main menu">
<input aria-haspopup="true" aria-label="Main menu" class="vector-dropdown-checkbox"
data-event-name="ui.dropdown-vector-main-menu-dropdown" id="vector-main-menu-dropdow
n-checkbox" role="button" type="checkbox"/>
<label aria-hidden="true" class="vector-dropdown-label cdx-button cdx-button--fake-b
utton cdx-button--fake-button--enabled cdx-button--weight-quiet cdx-button--icon-onl
y" for="vector-main-menu-dropdown-checkbox" id="vector-main-menu-dropdown-label"><sp
an class="vector-icon mw-ui-icon-menu mw-ui-icon-wikimedia-menu"></span>
<span class="vector-dropdown-label-text">Main menu</span>
</label>
<div class="vector-dropdown-content">
<div class="vector-unpinned-container" id="vector-main-menu-unpinned-container">
<div class="vector-main-menu vector-pinnable-element" id="vector-main-menu">
<div class="vector-pinnable-header vector-main-menu-pinnable-header vector-pinnable-
header-unpinned" data-feature-name="main-menu-pinned" data-pinnable-element-id="vect
or-main-menu" data-pinned-container-id="vector-main-menu-pinned-container" data-unpi
nned-container-id="vector-main-menu-unpinned-container">
<div class="vector-pinnable-header-label">Main menu</div>
<button class="vector-pinnable-header-toggle-button vector-pinnable-header-pin-butto
n" data-event-name="pinnable-header.vector-main-menu.pin">move to sidebar</button>
<button class="vector-pinnable-header-toggle-button vector-pinnable-header-unpin-but
ton" data-event-name="pinnable-header.vector-main-menu.unpin">hide</button>
</div>
<div class="vector-menu mw-portlet mw-portlet-navigation" id="p-navigation">
<div class="vector-menu-heading">
                Navigation
        </div>
<div class="vector-menu-content">
<ul class="vector-menu-content-list">
<li class="mw-list-item" id="n-mainpage-description"><a accesskey="z" href="/wiki/Ma
in_Page" title="Visit the main page [z]"><span>Main page</span></a></li><li class="m
w-list-item" id="n-contents"><a href="/wiki/Wikipedia:Contents" title="Guides to bro
wsing Wikipedia"><span>Contents</span></a></li><li class="mw-list-item" id="n-curren
tevents"><a href="/wiki/Portal:Current_events" title="Articles related to current ev
ents"><span>Current events</span></a></li><li class="mw-list-item" id="n-randompag
e"><a accesskey="x" href="/wiki/Special:Random" title="Visit a randomly selected art
icle [x]"><span>Random article</span></a></li><li class="mw-list-item" id="n-aboutsi
te"><a href="/wiki/Wikipedia:About" title="Learn about Wikipedia and how it works"><
span>About Wikipedia</span></a></li><li class="mw-list-item" id="n-contactpage"><a h
ref="//en.wikipedia.org/wiki/Wikipedia:Contact_us" title="How to contact Wikipedia">
<span>Contact us</span></a></li>
</ul>
</div>
</div>
<div class="vector-menu mw-portlet mw-portlet-interaction" id="p-interaction">
<div class="vector-menu-heading">
                Contribute
        </div>
<div class="vector-menu-content">
<ul class="vector-menu-content-list">
<li class="mw-list-item" id="n-help"><a href="/wiki/Help:Contents" title="Guidance o
n how to use and edit Wikipedia"><span>Help</span></a></li><li class="mw-list-item"
id="n-introduction"><a href="/wiki/Help:Introduction" title="Learn how to edit Wikip
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edia"><span>Learn to edit</span></a></li><li class="mw-list-item" id="n-portal"><a h
ref="/wiki/Wikipedia:Community_portal" title="The hub for editors"><span>Community p
ortal</span></a></li><li class="mw-list-item" id="n-recentchanges"><a accesskey="r"
href="/wiki/Special:RecentChanges" title="A list of recent changes to Wikipedia
[r]"><span>Recent changes</span></a></li><li class="mw-list-item" id="n-upload"><a h
ref="/wiki/Wikipedia:File_upload_wizard" title="Add images or other media for use on
Wikipedia"><span>Upload file</span></a></li><li class="mw-list-item" id="n-specialpa
ges"><a href="/wiki/Special:SpecialPages"><span>Special pages</span></a></li>
</ul>
</div>
</div>
</div>
</div>
</div>
</div>
</nav>
<a class="mw-logo" href="/wiki/Main_Page">
<img alt="" aria-hidden="true" class="mw-logo-icon" height="50" src="/static/images/
icons/wikipedia.png" width="50"/>
<span class="mw-logo-container skin-invert">
<img alt="Wikipedia" class="mw-logo-wordmark" src="/static/images/mobile/copyright/w
ikipedia-wordmark-en.svg" style="width: 7.5em; height: 1.125em;"/>
<img alt="The Free Encyclopedia" class="mw-logo-tagline" height="13" src="/static/im
ages/mobile/copyright/wikipedia-tagline-en.svg" style="width: 7.3125em; height: 0.81
25em;" width="117"/>
</span>
</a>
</div>
<div class="vector-header-end">
<div class="vector-search-box-vue vector-search-box-collapses vector-search-box-show
-thumbnail vector-search-box-auto-expand-width vector-search-box" id="p-search" role
="search">
<a accesskey="f" class="cdx-button cdx-button--fake-button cdx-button--fake-button--
enabled cdx-button--weight-quiet cdx-button--icon-only search-toggle" href="/wiki/Sp
ecial:Search" title="Search Wikipedia [f]"><span class="vector-icon mw-ui-icon-searc
h mw-ui-icon-wikimedia-search"></span>
<span>Search</span>
</a>
<div class="vector-typeahead-search-container">
<div class="cdx-typeahead-search cdx-typeahead-search--show-thumbnail cdx-typeahead-
search--auto-expand-width">
<form action="/w/index.php" class="cdx-search-input cdx-search-input--has-end-butto
n" id="searchform">
<div class="cdx-search-input__input-wrapper" data-search-loc="header-moved" id="simp
leSearch">
<div class="cdx-text-input cdx-text-input--has-start-icon">
<input accesskey="f" aria-label="Search Wikipedia" autocapitalize="sentences" class
="cdx-text-input__input" id="searchInput" name="search" placeholder="Search Wikipedi
a" spellcheck="false" title="Search Wikipedia [f]" type="search"/>
<span class="cdx-text-input__icon cdx-text-input__start-icon"></span>
</div>
<input name="title" type="hidden" value="Special:Search"/>
</div>
<button class="cdx-button cdx-search-input__end-button">Search</button>
</form>
</div>
```

```
    </div>
    </div>
    <nav aria-label="Personal tools" class="vector-user-links vector-user-links-wide">
    <div class="vector-user-links-main">
    <div class="vector-menu mw-portlet emptyPortlet" id="p-vector-user-menu-preference
    s">
    <div class="vector-menu-content">
    <ul class="vector-menu-content-list">
    </ul>
    </div>
    </div>
    <div class="vector-menu mw-portlet emptyPortlet" id="p-vector-user-menu-userpage">
    <div class="vector-menu-content">
    <ul class="vector-menu-content-list">
    </ul>
    </div>
    </div>
    <nav aria-label="Appearance" class="vector-appearance-landmark">
    <div class="vector-dropdown" id="vector-appearance-dropdown" title="Change the appea
    rance of the page's font size, width, and color">
    <input aria-haspopup="true" aria-label="Appearance" class="vector-dropdown-checkbox"
    data-event-name="ui.dropdown-vector-appearance-dropdown" id="vector-appearance-dropd
    own-checkbox" role="button" type="checkbox"/>
    <label aria-hidden="true" class="vector-dropdown-label cdx-button cdx-button--fake-b
    utton cdx-button--fake-button--enabled cdx-button--weight-quiet cdx-button--icon-onl
    y" for="vector-appearance-dropdown-checkbox" id="vector-appearance-dropdown-label"><
    span class="vector-icon mw-ui-icon-appearance mw-ui-icon-wikimedia-appearance"></spa
    n>
    <span class="vector-dropdown-label-text">Appearance</span>
    </label>
    <div class="vector-dropdown-content">
    <div class="vector-unpinned-container" id="vector-appearance-unpinned-container">
    </div>
    </div>
    </div>
    </nav>
    <div class="vector-menu mw-portlet emptyPortlet" id="p-vector-user-menu-notification
    s">
    <div class="vector-menu-content">
    <ul class="vector-menu-content-list">
    </ul>
    </div>
    </div>
    <div class="vector-menu mw-portlet" id="p-vector-user-menu-overflow">
    <div class="vector-menu-content">
    <ul class="vector-menu-content-list">
    <li class="user-links-collapsible-item mw-list-item user-links-collapsible-item" id
    ="pt-sitesupport-2"><a class="" data-mw="interface" href="https://donate.wikimedia.o
    rg/?wmf_source=donate&amp;wmf_medium=sidebar&amp;wmf_campaign=en.wikipedia.org&amp;u
    selang=en"><span>Donate</span></a>
    </li>
    <li class="user-links-collapsible-item mw-list-item user-links-collapsible-item" id
    ="pt-createaccount-2"><a class="" data-mw="interface" href="/w/index.php?title=Speci
    al:CreateAccount&amp;returnto=DeepSeek+%28chatbot%29" title="You are encouraged to c
    reate an account and log in; however, it is not mandatory"><span>Create account</spa
    n></a>
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</li>
<li class="user-links-collapsible-item mw-list-item user-links-collapsible-item" id
="pt-login-2"><a accesskey="o" class="" data-mw="interface" href="/w/index.php?title
=Special:UserLogin&amp;returnto=DeepSeek+%28chatbot%29" title="You're encouraged to
log in; however, it's not mandatory. [o]"><span>Log in</span></a>
</li>
</ul>
</div>
</div>
</div>
<div class="vector-dropdown vector-user-menu vector-button-flush-right vector-user-m
enu-logged-out" id="vector-user-links-dropdown" title="Log in and more options">
<input aria-haspopup="true" aria-label="Personal tools" class="vector-dropdown-check
box" data-event-name="ui.dropdown-vector-user-links-dropdown" id="vector-user-links-
dropdown-checkbox" role="button" type="checkbox"/>
<label aria-hidden="true" class="vector-dropdown-label cdx-button cdx-button--fake-b
utton cdx-button--fake-button--enabled cdx-button--weight-quiet cdx-button--icon-onl
y" for="vector-user-links-dropdown-checkbox" id="vector-user-links-dropdown-label"><
span class="vector-icon mw-ui-icon-ellipsis mw-ui-icon-wikimedia-ellipsis"></span>
<span class="vector-dropdown-label-text">Personal tools</span>
</label>
<div class="vector-dropdown-content">
<div class="vector-menu mw-portlet mw-portlet-personal user-links-collapsible-item"
id="p-personal" title="User menu">
<div class="vector-menu-content">
<ul class="vector-menu-content-list">
<li class="user-links-collapsible-item mw-list-item" id="pt-sitesupport"><a href="ht
tps://donate.wikimedia.org/?wmf_source=donate&amp;wmf_medium=sidebar&amp;wmf_campaig
n=en.wikipedia.org&amp;uselang=en"><span>Donate</span></a></li><li class="user-links
-collapsible-item mw-list-item" id="pt-createaccount"><a href="/w/index.php?title=Sp
ecial:CreateAccount&amp;returnto=DeepSeek+%28chatbot%29" title="You are encouraged t
o create an account and log in; however, it is not mandatory"><span class="vector-ic
on mw-ui-icon-userAdd mw-ui-icon-wikimedia-userAdd"></span> <span>Create account</sp
an></a></li><li class="user-links-collapsible-item mw-list-item" id="pt-login"><a ac
cesskey="o" href="/w/index.php?title=Special:UserLogin&amp;returnto=DeepSeek+%28chat
bot%29" title="You're encouraged to log in; however, it's not mandatory. [o]"><span
class="vector-icon mw-ui-icon-logIn mw-ui-icon-wikimedia-logIn"></span> <span>Log in
</span></a></li>
</ul>
</div>
</div>
<div class="vector-menu mw-portlet mw-portlet-user-menu-anon-editor" id="p-user-menu
-anon-editor">
<div class="vector-menu-heading">
                Pages for logged out editors <a aria-label="Learn more about editin
g" href="/wiki/Help:Introduction"><span>learn more</span></a>
</div>
<div class="vector-menu-content">
<ul class="vector-menu-content-list">
<li class="mw-list-item" id="pt-anoncontribs"><a accesskey="y" href="/wiki/Special:M
yContributions" title="A list of edits made from this IP address [y]"><span>Contribu
tions</span></a></li><li class="mw-list-item" id="pt-anontalk"><a accesskey="n" href
="/wiki/Special:MyTalk" title="Discussion about edits from this IP address [n]"><spa
n>Talk</span></a></li>
</ul>
</div>
```

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</div>
</div>
</div>
</nav>
</div>
</header>
</div>
<div class="mw-page-container">
<div class="mw-page-container-inner">
<div class="vector-sitenotice-container">
<div id="siteNotice"><!-- CentralNotice --></div>
</div>
<div class="vector-column-start">
<div class="vector-main-menu-container">
<div id="mw-navigation">
<nav aria-label="Site" class="vector-main-menu-landmark" id="mw-panel">
<div class="vector-pinned-container" id="vector-main-menu-pinned-container">
</div>
</nav>
</div>
</div>
<div class="vector-sticky-pinned-container">
<nav aria-label="Contents" class="mw-table-of-contents-container vector-toc-landmar
k" data-event-name="ui.sidebar-toc" id="mw-panel-toc">
<div class="vector-pinned-container" id="vector-toc-pinned-container">
<div class="vector-toc vector-pinnable-element" id="vector-toc">
<div class="vector-pinnable-header vector-toc-pinnable-header vector-pinnable-header
-pinned" data-feature-name="toc-pinned" data-pinnable-element-id="vector-toc">
<h2 class="vector-pinnable-header-label">Contents</h2>
<button class="vector-pinnable-header-toggle-button vector-pinnable-header-pin-butto
n" data-event-name="pinnable-header.vector-toc.pin">move to sidebar</button>
<button class="vector-pinnable-header-toggle-button vector-pinnable-header-unpin-but
ton" data-event-name="pinnable-header.vector-toc.unpin">hide</button>
</div>
<ul class="vector-toc-contents" id="mw-panel-toc-list">
<li class="vector-toc-list-item vector-toc-level-1" id="toc-mw-content-text">
<a class="vector-toc-link" href="#">
<div class="vector-toc-text">(Top)</div>
</a>
</li>
<li class="vector-toc-list-item vector-toc-level-1 vector-toc-list-item-expanded" id
="toc-History">
<a class="vector-toc-link" href="#History">
<div class="vector-toc-text">
<span class="vector-toc-numb">1</span>
<span>History</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-History-sublist">
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-1 vector-toc-list-item-expanded" id
="toc-Usage">
<a class="vector-toc-link" href="#Usage">
<div class="vector-toc-text">
<span class="vector-toc-numb">2</span>
```

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<span>Usage</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-Usage-sublist">
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-1 vector-toc-list-item-expanded" id
="toc-Operation">
<a class="vector-toc-link" href="#Operation">
<div class="vector-toc-text">
<span class="vector-toc-numb">3</span>
<span>Operation</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-Operation-sublist">
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-1 vector-toc-list-item-expanded" id
="toc-Reactions">
<a class="vector-toc-link" href="#Reactions">
<div class="vector-toc-text">
<span class="vector-toc-numb">4</span>
<span>Reactions</span>
</div>
</a>
<button aria-controls="toc-Reactions-sublist" class="cdx-button cdx-button--weight-q
uiet cdx-button--icon-only vector-toc-toggle">
<span class="vector-icon mw-ui-icon-wikimedia-expand"></span>
<span>Toggle Reactions subsection</span>
</button>
<ul class="vector-toc-list" id="toc-Reactions-sublist">
<li class="vector-toc-list-item vector-toc-level-2" id="toc-Challenge_to_US_AI_domin
ance">
<a class="vector-toc-link" href="#Challenge_to_US_AI_dominance">
<div class="vector-toc-text">
<span class="vector-toc-numb">4.1</span>
<span>Challenge to US AI dominance</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-Challenge_to_US_AI_dominance-sublist">
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-2" id="toc-Chinese_perspective">
<a class="vector-toc-link" href="#Chinese_perspective">
<div class="vector-toc-text">
<span class="vector-toc-numb">4.2</span>
<span>Chinese perspective</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-Chinese_perspective-sublist">
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-2" id="toc-Performance_and_succes
s">
<a class="vector-toc-link" href="#Performance_and_success">
<div class="vector-toc-text">
```

```
<span class="vector-toc-numb">4.3</span>
<span>Performance and success</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-Performance_and_success-sublist">
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-2" id="toc-Stock_market_implication
s">
<a class="vector-toc-link" href="#Stock_market_implications">
<div class="vector-toc-text">
<span class="vector-toc-numb">4.4</span>
<span>Stock market implications</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-Stock_market_implications-sublist">
</ul>
</li>
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-1 vector-toc-list-item-expanded" id
="toc-Concerns">
<a class="vector-toc-link" href="#Concerns">
<div class="vector-toc-text">
<span class="vector-toc-numb">5</span>
<span>Concerns</span>
</div>
</a>
<button aria-controls="toc-Concerns-sublist" class="cdx-button cdx-button--weight-qu
iet cdx-button--icon-only vector-toc-toggle">
<span class="vector-icon mw-ui-icon-wikimedia-expand"></span>
<span>Toggle Concerns subsection</span>
</button>
<ul class="vector-toc-list" id="toc-Concerns-sublist">
<li class="vector-toc-list-item vector-toc-level-2" id="toc-Distillation">
<a class="vector-toc-link" href="#Distillation">
<div class="vector-toc-text">
<span class="vector-toc-numb">5.1</span>
<span>Distillation</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-Distillation-sublist">
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-2" id="toc-Censorship">
<a class="vector-toc-link" href="#Censorship">
<div class="vector-toc-text">
<span class="vector-toc-numb">5.2</span>
<span>Censorship</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-Censorship-sublist">
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-2" id="toc-Security_and_privacy">
<a class="vector-toc-link" href="#Security_and_privacy">
```

```
<div class="vector-toc-text">
<span class="vector-toc-numb">5.3</span>
<span>Security and privacy</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-Security_and_privacy-sublist">
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-2" id="toc-Miscellaneous">
<a class="vector-toc-link" href="#Miscellaneous">
<div class="vector-toc-text">
<span class="vector-toc-numb">5.4</span>
<span>Miscellaneous</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-Miscellaneous-sublist">
</ul>
</li>
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-1 vector-toc-list-item-expanded" id
="toc-Restrictions">
<a class="vector-toc-link" href="#Restrictions">
<div class="vector-toc-text">
<span class="vector-toc-numb">6</span>
<span>Restrictions</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-Restrictions-sublist">
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-1 vector-toc-list-item-expanded" id
="toc-See_also">
<a class="vector-toc-link" href="#See_also">
<div class="vector-toc-text">
<span class="vector-toc-numb">7</span>
<span>See also</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-See_also-sublist">
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-1 vector-toc-list-item-expanded" id
="toc-Notes">
<a class="vector-toc-link" href="#Notes">
<div class="vector-toc-text">
<span class="vector-toc-numb">8</span>
<span>Notes</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-Notes-sublist">
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-1 vector-toc-list-item-expanded" id
="toc-References">
<a class="vector-toc-link" href="#References">
```

```
<div class="vector-toc-text">
<span class="vector-toc-numb">9</span>
<span>References</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-References-sublist">
</ul>
</li>
<li class="vector-toc-list-item vector-toc-level-1 vector-toc-list-item-expanded" id
="toc-External_links">
<a class="vector-toc-link" href="#External_links">
<div class="vector-toc-text">
<span class="vector-toc-numb">10</span>
<span>External links</span>
</div>
</a>
<ul class="vector-toc-list" id="toc-External_links-sublist">
</ul>
</li>
</ul>
</div>
</div>
</nav>
</div>
</div>
<div class="mw-content-container">
<main class="mw-body" id="content">
<header class="mw-body-header vector-page-titlebar">
<nav aria-label="Contents" class="vector-toc-landmark">
<div class="vector-dropdown vector-page-titlebar-toc vector-button-flush-left" id="v
ector-page-titlebar-toc" title="Table of Contents">
<input aria-haspopup="true" aria-label="Toggle the table of contents" class="vector-
dropdown-checkbox" data-event-name="ui.dropdown-vector-page-titlebar-toc" id="vector
-page-titlebar-toc-checkbox" role="button" type="checkbox"/>
<label aria-hidden="true" class="vector-dropdown-label cdx-button cdx-button--fake-b
utton cdx-button--fake-button--enabled cdx-button--weight-quiet cdx-button--icon-onl
y" for="vector-page-titlebar-toc-checkbox" id="vector-page-titlebar-toc-label"><span
class="vector-icon mw-ui-icon-listBullet mw-ui-icon-wikimedia-listBullet"></span>
<span class="vector-dropdown-label-text">Toggle the table of contents</span>
</label>
<div class="vector-dropdown-content">
<div class="vector-unpinned-container" id="vector-page-titlebar-toc-unpinned-contain
er">
</div>
</div>
</div>
</nav>
<h1 class="firstHeading mw-first-heading" id="firstHeading"><span class="mw-page-tit
le-main">DeepSeek (chatbot)</span></h1>
<div class="vector-dropdown mw-portlet mw-portlet-lang" id="p-lang-btn">
<input aria-haspopup="true" aria-label="Go to an article in another language. Availa
ble in 1 language" class="vector-dropdown-checkbox mw-interlanguage-selector" data-e
vent-name="ui.dropdown-p-lang-btn" id="p-lang-btn-checkbox" role="button" type="chec
kbox"/>
<label aria-hidden="true" class="vector-dropdown-label cdx-button cdx-button--fake-b
utton cdx-button--fake-button--enabled cdx-button--weight-quiet cdx-button--action-p
```

```
rogressive mw-portlet-lang-heading-1" for="p-lang-btn-checkbox" id="p-lang-btn-labe
l"><span class="vector-icon mw-ui-icon-language-progressive mw-ui-icon-wikimedia-lan
guage-progressive"></span>
<span class="vector-dropdown-label-text">1 language</span>
</label>
<div class="vector-dropdown-content">
<div class="vector-menu-content">
<ul class="vector-menu-content-list">
<li class="interlanguage-link interwiki-zh badge-Q70893996 mw-list-item" title=""><a
class="interlanguage-link-target" data-language-autonym="中文" data-language-local-n
ame="Chinese" data-title="DeepSeek" href="https://zh.wikipedia.org/wiki/DeepSeek" hr
eflang="zh" lang="zh" title="DeepSeek – Chinese"><span>中文</span></a></li>
</ul>
<div class="after-portlet after-portlet-lang"><span class="wb-langlinks-edit wb-lang
links-link"><a class="wbc-editpage" href="https://www.wikidata.org/wiki/Special:Enti
tyPage/Q132324293#sitelinks-wikipedia" title="Edit interlanguage links">Edit links</
a></span></div>
</div>
</div>
</div>
</header>
<div class="vector-page-toolbar">
<div class="vector-page-toolbar-container">
<div id="left-navigation">
<nav aria-label="Namespaces">
<div class="vector-menu vector-menu-tabs mw-portlet mw-portlet-associated-pages" id
="p-associated-pages">
<div class="vector-menu-content">
<ul class="vector-menu-content-list">
<li class="selected vector-tab-noicon mw-list-item" id="ca-nstab-main"><a accesskey
="c" href="/wiki/DeepSeek_(chatbot)" title="View the content page [c]"><span>Article
</span></a></li><li class="vector-tab-noicon mw-list-item" id="ca-talk"><a accesskey
="t" href="/wiki/Talk:DeepSeek_(chatbot)" rel="discussion" title="Discuss improvemen
ts to the content page [t]"><span>Talk</span></a></li>
</ul>
</div>
</div>
<div class="vector-dropdown emptyPortlet" id="vector-variants-dropdown">
<input aria-haspopup="true" aria-label="Change language variant" class="vector-dropd
own-checkbox" data-event-name="ui.dropdown-vector-variants-dropdown" id="vector-vari
ants-dropdown-checkbox" role="button" type="checkbox"/>
<label aria-hidden="true" class="vector-dropdown-label cdx-button cdx-button--fake-b
utton cdx-button--fake-button--enabled cdx-button--weight-quiet" for="vector-variant
s-dropdown-checkbox" id="vector-variants-dropdown-label"><span class="vector-dropdow
n-label-text">English</span>
</label>
<div class="vector-dropdown-content">
<div class="vector-menu mw-portlet mw-portlet-variants emptyPortlet" id="p-variant
s">
<div class="vector-menu-content">
<ul class="vector-menu-content-list">
</ul>
</div>
</div>
</div>
</div>
```

```
</nav>
</div>
<div class="vector-collapsible" id="right-navigation">
<nav aria-label="Views">
<div class="vector-menu vector-menu-tabs mw-portlet mw-portlet-views" id="p-views">
<div class="vector-menu-content">
<ul class="vector-menu-content-list">
<li class="selected vector-tab-noicon mw-list-item" id="ca-view"><a href="/wiki/Deep
Seek_(chatbot)"><span>Read</span></a></li><li class="vector-tab-noicon mw-list-item"
id="ca-edit"><a accesskey="e" href="/w/index.php?title=DeepSeek_(chatbot)&amp;action
=edit" title="Edit this page [e]"><span>Edit</span></a></li><li class="vector-tab-no
icon mw-list-item" id="ca-history"><a accesskey="h" href="/w/index.php?title=DeepSee
k_(chatbot)&amp;action=history" title="Past revisions of this page [h]"><span>View h
istory</span></a></li>
</ul>
</div>
</div>
</nav>
<nav aria-label="Page tools" class="vector-page-tools-landmark">
<div class="vector-dropdown vector-page-tools-dropdown" id="vector-page-tools-dropdo
wn">
<input aria-haspopup="true" aria-label="Tools" class="vector-dropdown-checkbox" data
-event-name="ui.dropdown-vector-page-tools-dropdown" id="vector-page-tools-dropdown-
checkbox" role="button" type="checkbox"/>
<label aria-hidden="true" class="vector-dropdown-label cdx-button cdx-button--fake-b
utton cdx-button--fake-button--enabled cdx-button--weight-quiet" for="vector-page-to
ols-dropdown-checkbox" id="vector-page-tools-dropdown-label"><span class="vector-dro
pdown-label-text">Tools</span>
</label>
<div class="vector-dropdown-content">
<div class="vector-unpinned-container" id="vector-page-tools-unpinned-container">
<div class="vector-page-tools vector-pinnable-element" id="vector-page-tools">
<div class="vector-pinnable-header vector-page-tools-pinnable-header vector-pinnable
-header-unpinned" data-feature-name="page-tools-pinned" data-pinnable-element-id="ve
ctor-page-tools" data-pinned-container-id="vector-page-tools-pinned-container" data-
unpinned-container-id="vector-page-tools-unpinned-container">
<div class="vector-pinnable-header-label">Tools</div>
<button class="vector-pinnable-header-toggle-button vector-pinnable-header-pin-butto
n" data-event-name="pinnable-header.vector-page-tools.pin">move to sidebar</button>
<button class="vector-pinnable-header-toggle-button vector-pinnable-header-unpin-but
ton" data-event-name="pinnable-header.vector-page-tools.unpin">hide</button>
</div>
<div class="vector-menu mw-portlet mw-portlet-cactions emptyPortlet vector-has-colla
psible-items" id="p-cactions" title="More options">
<div class="vector-menu-heading">
                    Actions
        </div>
<div class="vector-menu-content">
<ul class="vector-menu-content-list">
<li class="selected vector-more-collapsible-item mw-list-item" id="ca-more-view"><a
href="/wiki/DeepSeek_(chatbot)"><span>Read</span></a></li><li class="vector-more-col
lapsible-item mw-list-item" id="ca-more-edit"><a accesskey="e" href="/w/index.php?ti
tle=DeepSeek_(chatbot)&amp;action=edit" title="Edit this page [e]"><span>Edit</span>
</a></li><li class="vector-more-collapsible-item mw-list-item" id="ca-more-history">
<a href="/w/index.php?title=DeepSeek_(chatbot)&amp;action=history"><span>View histor
y</span></a></li>
```

```
</ul>
</div>
</div>
<div class="vector-menu mw-portlet mw-portlet-tb" id="p-tb">
<div class="vector-menu-heading">
                General
        </div>
<div class="vector-menu-content">
<ul class="vector-menu-content-list">
<li class="mw-list-item" id="t-whatlinkshere"><a accesskey="j" href="/wiki/Special:W
hatLinksHere/DeepSeek_(chatbot)" title="List of all English Wikipedia pages containi
ng links to this page [j]"><span>What links here</span></a></li><li class="mw-list-i
tem" id="t-recentchangeslinked"><a accesskey="k" href="/wiki/Special:RecentChangesLi
nked/DeepSeek_(chatbot)" rel="nofollow" title="Recent changes in pages linked from t
his page [k]"><span>Related changes</span></a></li><li class="mw-list-item" id="t-up
load"><a accesskey="u" href="//en.wikipedia.org/wiki/Wikipedia:File_Upload_Wizard" t
itle="Upload files [u]"><span>Upload file</span></a></li><li class="mw-list-item" id
="t-permalink"><a href="/w/index.php?title=DeepSeek_(chatbot)&amp;oldid=1288447648"
title="Permanent link to this revision of this page"><span>Permanent link</span></a>
</li><li class="mw-list-item" id="t-info"><a href="/w/index.php?title=DeepSeek_(chat
bot)&amp;action=info" title="More information about this page"><span>Page informatio
n</span></a></li><li class="mw-list-item" id="t-cite"><a href="/w/index.php?title=Sp
ecial:CiteThisPage&amp;page=DeepSeek_%28chatbot%29&amp;id=1288447648&amp;wpFormIdent
ifier=titleform" title="Information on how to cite this page"><span>Cite this page</
span></a></li><li class="mw-list-item" id="t-urlshortener"><a href="/w/index.php?tit
le=Special:UrlShortener&amp;url=https%3A%2F%2Fen.wikipedia.org%2Fwiki%2FDeepSeek_%28
chatbot%29"><span>Get shortened URL</span></a></li><li class="mw-list-item" id="t-ur
lshortener-qrcode"><a href="/w/index.php?title=Special:QrCode&amp;url=https%3A%2F%2F
en.wikipedia.org%2Fwiki%2FDeepSeek_%28chatbot%29"><span>Download QR code</span></a>
</li>
</ul>
</div>
</div>
<div class="vector-menu mw-portlet mw-portlet-coll-print_export" id="p-coll-print_ex
port">
<div class="vector-menu-heading">
                Print/export
        </div>
<div class="vector-menu-content">
<ul class="vector-menu-content-list">
<li class="mw-list-item" id="coll-download-as-rl"><a href="/w/index.php?title=Specia
l:DownloadAsPdf&amp;page=DeepSeek_%28chatbot%29&amp;action=show-download-screen" tit
le="Download this page as a PDF file"><span>Download as PDF</span></a></li><li class
="mw-list-item" id="t-print"><a accesskey="p" href="/w/index.php?title=DeepSeek_(cha
tbot)&amp;printable=yes" title="Printable version of this page [p]"><span>Printable
version</span></a></li>
</ul>
</div>
</div>
<div class="vector-menu mw-portlet mw-portlet-wikibase-otherprojects" id="p-wikibase
-otherprojects">
<div class="vector-menu-heading">
                In other projects
        </div>
<div class="vector-menu-content">
<ul class="vector-menu-content-list">
```

```
<li class="wb-otherproject-link wb-otherproject-commons mw-list-item"><a href="http
s://commons.wikimedia.org/wiki/Category:DeepSeek" hreflang="en"><span>Wikimedia Comm
ons</span></a></li><li class="wb-otherproject-link wb-otherproject-wikibase-dataitem
mw-list-item" id="t-wikibase"><a accesskey="g" href="https://www.wikidata.org/wiki/S
pecial:EntityPage/Q132324293" title="Structured data on this page hosted by Wikidata
[g]"><span>Wikidata item</span></a></li>
</ul>
</div>
</div>
</div>
</div>
</div>
</div>
</nav>
</div>
</div>
</div>
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<div class="vector-sticky-pinned-container">
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<div class="vector-pinned-container" id="vector-page-tools-pinned-container">
</div>
</nav>
<nav aria-label="Appearance" class="vector-appearance-landmark">
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or-appearance" data-pinned-container-id="vector-appearance-pinned-container" data-un
pinned-container-id="vector-appearance-unpinned-container">
<div class="vector-pinnable-header-label">Appearance</div>
<button class="vector-pinnable-header-toggle-button vector-pinnable-header-pin-butto
n" data-event-name="pinnable-header.vector-appearance.pin">move to sidebar</button>
<button class="vector-pinnable-header-toggle-button vector-pinnable-header-unpin-but
ton" data-event-name="pinnable-header.vector-appearance.unpin">hide</button>
</div>
</div>
</div>
</nav>
</div>
</div>
<div aria-labelledby="firstHeading" class="vector-body" data-mw-ve-target-container
="" id="bodyContent">
<div class="vector-body-before-content">
<div class="mw-indicators">
</div>
<div class="noprint" id="siteSub">From Wikipedia, the free encyclopedia</div>
</div>
<div id="contentSub"><div id="mw-content-subtitle"></div></div>
<div class="mw-body-content" id="mw-content-text"><div class="mw-content-ltr mw-pars
er-output" dir="ltr" lang="en"><div class="shortdescription nomobile noexcerpt nopri
nt searchaux" style="display:none">Chatbot developed by DeepSeek</div>
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ont-style:italic}.mw-parser-output div.hatnote{padding-left:1.6em;margin-bottom:0.5e
m}.mw-parser-output .hatnote i{font-style:normal}.mw-parser-output .hatnote+link+.ha
tnote{margin-top:-0.5em}@media print{body.ns-0 .mw-parser-output .hatnote{display:no
```

ne!important}}</style><div class="hatnote navigation-not-searchable" role="note">Thi
s article is about the chatbot. For the company, see <a href="/wiki/DeepSeek" title
="DeepSeek">DeepSeek.</div>
<p class="mw-empty-elt">
</p>
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ar:none;float:none;background-color:transparent}.mw-parser-output .infobox-3cols-chi
ld{margin:auto}.mw-parser-output .infobox .navbar{font-size:100%}@media screen{html.
skin-theme-clientpref-night .mw-parser-output .infobox-full-data:not(.notheme)>div:n
ot(.notheme)[style]{background:#1f1f23!important;color:#f8f9fa}}@media screen and (p
refers-color-scheme:dark){html.skin-theme-clientpref-os .mw-parser-output .infobox-f
ull-data:not(.notheme) div:not(.notheme){background:#1f1f23!important;color:#f8f9f
a}}@media(min-width:640px){body.skin--responsive .mw-parser-output .infobox-table{di
splay:table!important}body.skin--responsive .mw-parser-output .infobox-table>caption
{display:table-caption!important}body.skin--responsive .mw-parser-output .infobox-ta
ble>tbody{display:table-row-group}body.skin--responsive .mw-parser-output .infobox-t
able tr{display:table-row!important}body.skin--responsive .mw-parser-output .infobox
-table th,body.skin--responsive .mw-parser-output .infobox-table td{padding-left:inh
erit;padding-right:inherit}}</style><table class="infobox vevent"><caption class="in
fobox-title summary">DeepSeek</caption><tbody><tr><td class="infobox-image logo" col
span="2"><a class="mw-file-
description" href="/wiki/File:DeepSeek_logo.svg"><img class="mw-file-element" data-f
ile-height="109" data-file-width="512" decoding="async" height="66" src="//upload.wi
kimedia.org/wikipedia/commons/thumb/e/ec/DeepSeek_logo.svg/330px-DeepSeek_logo.svg.p
ng" srcset="//upload.wikimedia.org/wikipedia/commons/thumb/e/ec/DeepSeek_logo.svg/50
0px-DeepSeek_logo.svg.png 1.5x, //upload.wikimedia.org/wikipedia/commons/thumb/e/ec/
DeepSeek_logo.svg/620px-DeepSeek_logo.svg.png 2x" width="310"/></td></tr>
<tr><th class="infobox-label" scope="row" style="white-space: nowrap;"><a href="/wik
i/Programmer" title="Programmer">Developer(s)</th><td class="infobox-data"><a hr
ef="/wiki/DeepSeek" title="DeepSeek">DeepSeek</td></tr><tr><th class="infobox-la
bel" scope="row" style="white-space: nowrap;">Initial release</th><td class="infobox
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ki/Software_release_life_cycle" title="Software release life cycle">Stable release</
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ss="noprint">; 41 days ago (<span class="bday dtst
art published updated">2025-03-24)
R1
   / 10 January 2025; 3 months ago<span style="display:
none"> (2025-01-10)</div>
</td></tr><tr style="display:none"><td colspan="2">
</td></tr><tr><th class="infobox-label" scope="row" style="white-space: nowrap;">Wri
tten in</th><td class="infobox-data"><a href="/wiki/Python_(programming_language)" t
itle="Python (programming language)">Python</td></tr><tr><th class="infobox-labe
l" scope="row" style="white-space: nowrap;"><a href="/wiki/Operating_system" title
="Operating system">Operating system</th><td class="infobox-data"><style data-mw
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ser-output .plainlist ol li,.mw-parser-output .plainlist ul li{margin-bottom:0}</sty
le><div class="plainlist">
Web app
An
droid

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<li><a href="/wiki/IOS" title="IOS">iOS</a></li></ul>
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p;"><a href="/wiki/Software_categories#Categorization_approaches" title="Software ca
tegories">Type</a></th><td class="infobox-data"><a href="/wiki/Chatbot" title="Chatb
ot">Chatbot</a></td></tr><tr><th class="infobox-label" scope="row" style="white-spac
e: nowrap;"><a href="/wiki/Software_license" title="Software license">License</a></t
h><td class="infobox-data"><link href="mw-data:TemplateStyles:r1126788409" rel="mw-d
eduplicated-inline-style"><div class="plainlist">
<ul><li>Web and mobile apps: <a href="/wiki/Proprietary_software" title="Proprietary
software">Proprietary</a></li>
<li>Model (<a class="mw-redirect" href="/wiki/DeepSeek-R1" title="DeepSeek-R1">R1</a
> and <a class="mw-redirect" href="/wiki/DeepSeek-V3" title="DeepSeek-V3">V3</a>): <
a href="/wiki/MIT_License" title="MIT License">MIT License</a></li></ul>
</div></link></td></tr><tr><th class="infobox-label" scope="row" style="white-space:
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ext" href="https://chat.deepseek.com/" rel="nofollow">chat<wbr/>.deepseek<wbr/>.com
</a></span> <span class="mw-valign-text-top noprint" typeof="mw:File/Frameless"><a h
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mg alt="Edit this at Wikidata" class="mw-file-element" data-file-height="20" data-fi
le-width="20" decoding="async" height="10" src="//upload.wikimedia.org/wikipedia/en/
thumb/8/8a/OOjs_UI_icon_edit-ltr-progressive.svg/20px-OOjs_UI_icon_edit-ltr-progress
ive.svg.png" width="10"/></a></span></td></tr></tbody></table>
<p><b>DeepSeek</b><sup class="reference" id="cite_ref-1"><a href="#cite_note-1"><spa
n class="cite-bracket">[</span>a<span class="cite-bracket">]</span></a></sup> is a <
a href="/wiki/Chatbot" title="Chatbot">chatbot</a> created by the Chinese artificial
intelligence company <a href="/wiki/DeepSeek" title="DeepSeek">DeepSeek</a>.
</p><p>Released on 10 January 2025, <a class="mw-redirect" href="/wiki/DeepSeek-R1"
title="DeepSeek-R1">DeepSeek-R1</a> surpassed <a href="/wiki/ChatGPT" title="ChatGP
T">ChatGPT</a> as the most downloaded <a href="/wiki/Freeware" title="Freeware">free
ware</a> app on the <a href="/wiki/App_Store_(Apple)" title="App Store (Apple)">iOS
App Store</a> in the United States by 27 January.<sup class="reference" id="cite_ref
-Metz-2025b_2-0"><a href="#cite_note-Metz-2025b-2"><span class="cite-bracket">[</spa
n>1<span class="cite-bracket">]</span></a></sup> DeepSeek's success against larger a
nd more established rivals has been described as "upending AI"<sup class="reference"
id="cite_ref-Metz-2025b_2-1"><a href="#cite_note-Metz-2025b-2"><span class="cite-bra
cket">[</span>1<span class="cite-bracket">]</span></a></sup> and initiating "a globa
l AI <a href="/wiki/Space_Race" title="Space Race">space race</a>".<sup class="refer
ence" id="cite_ref-Zahn_3-0"><a href="#cite_note-Zahn-3"><span class="cite-bracket">
[</span>2<span class="cite-bracket">]</span></a></sup> DeepSeek's compliance with Ch
inese government <a href="/wiki/Chinese_censorship_abroad" title="Chinese censorship
abroad">censorship policies</a> and its <a href="/wiki/Mass_surveillance_in_China" t
itle="Mass surveillance in China">data collection practices</a> have also raised con
cerns over privacy and information control in the model, prompting regulatory scruti
ny in multiple countries. However, it has also been praised for its open weights and
infrastructure code, energy efficiency and contributions to the <a href="/wiki/Open-
source_artificial_intelligence" title="Open-source artificial intelligence">open-sou
rce community</a>.<sup class="reference" id="cite_ref-4"><a href="#cite_note-4"><spa
n class="cite-bracket">[</span>3<span class="cite-bracket">]</span></a></sup><sup cl
ass="reference" id="cite_ref-5"><a href="#cite_note-5"><span class="cite-bracket">
[</span>4<span class="cite-bracket">]</span></a></sup>
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tsection"><span class="mw-editsection-bracket">[</span><a href="/w/index.php?title=D
eepSeek_(chatbot)&amp;action=edit&amp;section=1" title="Edit section: History"><span
>edit</span></a><span class="mw-editsection-bracket">]</span></span></div>
```

<p>On 10 January 2025, DeepSeek released the chatbot, based on the DeepSeek-R1 mode
l, for iOS and <a href="/wiki/Android_(operating
_system)" title="Android (operating system)">Android. By 27 January, DeepSeek-R1
surpassed ChatGPT as the most-downloaded
freeware app on the <a href="/wiki/App
Store(Apple)" title="App Store (Apple)">iOS App Store in the United States,<su
p class="reference" id="cite_ref-Metz-2025b_2-2"><
span class="cite-bracket">[1]</sup> whi
ch resulted in an 18% drop in Nvidia's share price.<sup class="reference" id="cite_r
ef-6">[5<span class="cite-b
racket">]</sup><sup class="reference" id="cite_ref-Picchi_7-0"><a href="#
cite_note-Picchi-7">[6]
</sup> After a "large-scale" <a href="/wiki/Cyberattack" title="Cyberatta
ck">cyberattack on the same day disrupted the proper functioning of its servers,
DeepSeek limited its new user registration to phone numbers from mainland China, ema
il addresses, or Google account logins.<sup class="reference" id="cite_ref-8"><a hre
f="#cite_note-8">[7]</s
pan></sup><sup class="reference" id="cite_ref-9"><span cl
ass="cite-bracket">[8]</sup>
</p><p>On 3 April 2025, in collaboration with researchers at <a href="/wiki/Tsinghua
_University" title="Tsinghua University">Tsinghua University, DeepSeek published
a paper unveiling a new model that combines the techniques generative reward modelin
g (GRM) and self-principled critique tuning (SPCT). The resulting model is referred
to as DeepSeek-GRM. The goal of using these techniques is to foster more effective i
nference-time scaling within their LLM and chatbot services. Notably DeepSeek has sa
id that these new models will be released and made open source.<sup class="referenc
e" id="cite_ref-10">[9<spa
n class="cite-bracket">]</sup><sup class="reference" id="cite_ref-11"><a
href="#cite_note-11">[10<span class="cite-bracke
t">]</sup>
</p><p>On 30 April 2025, Deepseek released its math-focused Artificial Intelligence
Model named "DeepSeek-Prover-V2-671B". This Model is useful for formal theorem provi
ng and mathematical reasoning.<sup class="reference" id="cite_ref-12"><a href="#cite
_note-12">[11]</
a></sup><sup class="reference" id="cite_ref-13"><span class
="cite-bracket">[12]</sup>
</p>
<div class="mw-heading mw-heading2"><h2 id="Usage">Usage</h2><span class="mw-editsec
tion">[<a href="/w/index.php?title=DeepS
eek_(chatbot)&action=edit&section=2" title="Edit section: Usage">edit
]</div>
<p>DeepSeek can answer questions, solve logic problems, and write computer programs
on par with other chatbots, according to benchmark tests used by American AI compani
es.<sup class="reference" id="cite_ref-Metz-2025b_2-3"><a href="#cite_note-Metz-2025
b-2">[1]</su
p>
</p><p>Users can access the chatbot for free through the official DeepSeek website o
r mobile application, without limitation on the number of queries.<sup class="refere
nce" id="cite_ref-DeepSeekPriceComparison_14-0"><a href="#cite_note-DeepSeekPriceCom
parison-14">[13]
</sup> DeepSeek also offers access to the <a href="/wiki/DeepSeek#R1" title="Dee
pSeek">R1 and V3 models that po
wer the chatbot via an API with a usage-based pr
icing model.<sup class="reference" id="cite_ref-15"><span cl
ass="cite-bracket">[14]</sup> This moda
lity is primarily targeted towards developers and businesses. As of February 2025, A

PI usage is priced at approximately $0.55 per million input tokens and $2.19 per million output tokens, making it less expensive than some competing services.<sup class="reference" id="cite_ref-DeepSeekPriceComparison_14-1">[13]</sup>
</p>
<div class="mw-heading mw-heading2"><h2 id="Operation">Operation</h2>[edit]</div>
<p>DeepSeek-V3 uses significantly fewer resources compared to its peers. For example, whereas the world's leading AI companies train their chatbots with supercomputers using as many as 16,000 graphics processing units (GPUs), DeepSeek claims to have needed only about 2,000 GPUs—namely, the H800 series chips from Nvidia.<sup class="reference" id="cite_ref-Deng,_Chengqi-2024_16-0">[15]</sup> It was trained in around 55 days at a cost of US$5.58 million,<sup class="reference" id="cite_ref-Deng,_Chengqi-2024_16-1">[15]</sup> which is roughly one-tenth of what tech giant Meta spent building its latest AI technology.<sup class="reference" id="cite_ref-Metz-2025b_2-4">[1]</sup>
</p>
<div class="mw-heading mw-heading2"><h2 id="Reactions">Reactions</h2>[edit]</div>
<p>DeepSeek's success against larger and more established rivals has been described as "upending AI",<sup class="reference" id="cite_ref-Metz-2025b_2-5">[1]</sup> constituting "the first shot at what is emerging as a global AI space race",<sup class="reference" id="cite_ref-Zahn_3-1">[2]</sup> and ushering in "a new era of AI brinkmanship".<sup class="reference" id="cite_ref-:1_17-0">[16]</sup>
</p>
<div class="mw-heading mw-heading3"><h3 id="Challenge_to_US_AI_dominance">Challenge to US AI dominance</h3>[edit]</div>
<p>DeepSeek's competitive performance at relatively minimal cost has been recognized as potentially challenging the global dominance of American AI models.<sup class="reference" id="cite_ref-18">[17]</sup> Various publications and news media, such as <i>The Hill</i> and <i>The Guardian,</i> have described the release of the R1 chatbot as a "Sputnik moment" for American AI,<sup class="reference" id="cite_ref-19">[18]</sup><sup class="referenc

e" id="cite_ref-Milmo-2025_20-0">[19]</sup>^{[20]} echoing Marc Andreessen's view. OpenAI wrote a letter to the Office of Science and Technology Policy (OSTP), in March 2025, citing issues concerning a possibility that Deepseek could manipulate responses to cause harm.^{[21]}
</p>
<div class="mw-heading mw-heading3"><h3 id="Chinese_perspective">Chinese perspective</h3>[edit]</div>
<p>DeepSeek's founder Liang Wenfeng has been compared to OpenAI CEO Sam Altman, with CNN calling him the Sam Altman of China and an evangelist for AI.^{[22]} Chinese state media widely praised DeepSeek as a national asset.^{[23]}^{[24]} On 20 January 2025, China's Premier Li Qiang invited Wenfeng to his symposium with experts and asked him to provide opinions and suggestions on a draft for comments of the annual 2024 government work report.^{[25]} On 20 February 2025, Wenfeng met with Xi Jinping, who encouraged government officials to experiment with DeepSeek.^{[21]} Government officials responded to Xi's approval of the chatbot by reportedly using it to draft legal judgements, propose medical treatment plans, and analyze surveillance videos to search for missing persons.^{[21]}
</p>
<div class="mw-heading mw-heading3"><h3 id="Performance_and_success">Performance and success</h3>[edit]</div>
<p>Leading figures in the American AI sector had mixed reactions to DeepSeek's performance and success.^{[26]} Microsoft CEO Satya Nadella and Altman—whose companies are involved in the United States government-backed "Stargate Project" to develop American AI infrastructure—both called DeepSeek "super impressive".^{[27]}^{[28]} Various companies including <a href="/wiki/Amazon

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_Web_Services" title="Amazon Web Services">Amazon Web Services</a>, <a href="/wiki/T
oyota" title="Toyota">Toyota</a>, and <a href="/wiki/Stripe,_Inc." title="Stripe, In
c.">Stripe</a> are seeking to use the model in their program.<sup class="reference"
id="cite_ref-30"><a href="#cite_note-30"><span class="cite-bracket">[</span>29<span
class="cite-bracket">]</span></a></sup> When American President <a href="/wiki/Donal
d_Trump" title="Donald Trump">Donald Trump</a> announced The Stargate Project, he re
ferred to DeepSeek as a wake-up call<sup class="reference" id="cite_ref-31"><a href
="#cite_note-31"><span class="cite-bracket">[</span>30<span class="cite-bracket">]</
span></a></sup> and a positive development.<sup class="reference" id="cite_ref-32"><
a href="#cite_note-32"><span class="cite-bracket">[</span>31<span class="cite-bracke
t">]</span></a></sup><sup class="reference" id="cite_ref-Milmo-2025_20-1"><a href="#
cite_note-Milmo-2025-20"><span class="cite-bracket">[</span>19<span class="cite-brac
ket">]</span></a></sup><sup class="reference" id="cite_ref-Hoskins_RJ_21-1"><a href
="#cite_note-Hoskins_RJ-21"><span class="cite-bracket">[</span>20<span class="cite-b
racket">]</span></a></sup><sup class="reference" id="cite_ref-33"><a href="#cite_not
e-33"><span class="cite-bracket">[</span>32<span class="cite-bracket">]</span></a></
sup>
</p><p>Other leaders in the AI field, however—including <a href="/wiki/Scale_AI" tit
le="Scale AI">Scale AI</a> CEO <a href="/wiki/Alexandr_Wang" title="Alexandr Wang">A
lexandr Wang</a>, <a href="/wiki/Anthropic" title="Anthropic">Anthropic</a> cofounde
r and CEO <a href="/wiki/Dario_Amodei" title="Dario Amodei">Dario Amodei</a>, and <a
href="/wiki/Elon_Musk" title="Elon Musk">Elon Musk</a>—have expressed skepticism of
the app's performance or of the sustainability of its success.<sup class="reference"
id="cite_ref-DSCI_1_27-1"><a href="#cite_note-DSCI_1-27"><span class="cite-bracket">
[</span>26<span class="cite-bracket">]</span></a></sup><sup class="reference" id="ci
te_ref-34"><a href="#cite_note-34"><span class="cite-bracket">[</span>33<span class
="cite-bracket">]</span></a></sup><sup class="reference" id="cite_ref-35"><a href="#
cite_note-35"><span class="cite-bracket">[</span>34<span class="cite-bracket">]</spa
n></a></sup>
</p>
<div class="mw-heading mw-heading3"><h3 id="Stock_market_implications">Stock market
implications</h3><span class="mw-editsection"><span class="mw-editsection-bracket">
[</span><a href="/w/index.php?title=DeepSeek_(chatbot)&amp;action=edit&amp;section=
8" title="Edit section: Stock market implications"><span>edit</span></a><span class
="mw-editsection-bracket">]</span></span></div><p>
DeepSeek's optimization of limited resources has highlighted potential limits of Uni
ted States sanctions on China's AI development, including export restrictions on adv
anced AI chips to China.<sup class="reference" id="cite_ref-scmp_1_January_2025_36-
0"><a href="#cite_note-scmp_1_January_2025-36"><span class="cite-bracket">[</span>35
<span class="cite-bracket">]</span></a></sup><sup class="reference" id="cite_ref-3
7"><a href="#cite_note-37"><span class="cite-bracket">[</span>36<span class="cite-br
acket">]</span></a></sup> The success of the company's AI models consequently "spark
ed market turmoil"<sup class="reference" id="cite_ref-38"><a href="#cite_note-38"><s
pan class="cite-bracket">[</span>37<span class="cite-bracket">]</span></a></sup> and
caused shares in major global technology companies to plunge on 27 January 2025: Nvi
dia's stock fell by as much as 17–18%,<sup class="reference" id="cite_ref-39"><a hre
f="#cite_note-39"><span class="cite-bracket">[</span>38<span class="cite-bracket">]
</span></a></sup> as did the stock of rival <a href="/wiki/Broadcom" title="Broadco
m">Broadcom</a>. Other tech firms also sank, including <a href="/wiki/Microsoft" tit
le="Microsoft">Microsoft</a> (down 2.5%), <a href="/wiki/Google" title="Google">Goog
le</a>'s owner <a href="/wiki/Alphabet_Inc." title="Alphabet Inc.">Alphabet</a> (dow
n over 4%), and Dutch chip equipment maker <a href="/wiki/ASML_Holding" title="ASML
Holding">ASML</a> (down over 7%).<sup class="reference" id="cite_ref-Hoskins_RJ_21-
2"><a href="#cite_note-Hoskins_RJ-21"><span class="cite-bracket">[</span>20<span cla
ss="cite-bracket">]</span></a></sup> A global sell-off of technology stocks on <a hr
ef="/wiki/Nasdaq" title="Nasdaq">Nasdaq</a>, prompted by the release of the <code>R1
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</code> model, led to record losses of about $593 billion in the market capitalizati
ons of AI and computer hardware companies;<sup class="reference" id="cite_ref-40"><a
href="#cite_note-40"><span class="cite-bracket">[</span>39<span class="cite-bracke
t">]</span></a></sup> and by the next day a total of $1 trillion of value was wiped
from American stocks.<sup class="reference" id="cite_ref-Milmo-2025_20-2"><a href="#
cite_note-Milmo-2025-20"><span class="cite-bracket">[</span>19<span class="cite-brac
ket">]</span></a></sup></p><figure class="mw-default-size" typeof="mw:File/Thumb"><a
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ht="194" src="//upload.wikimedia.org/wikipedia/commons/thumb/3/35/Deepseek_login_err
or.png/330px-Deepseek_login_error.png" srcset="//upload.wikimedia.org/wikipedia/comm
ons/thumb/3/35/Deepseek_login_error.png/500px-Deepseek_login_error.png 1.5x, //uploa
d.wikimedia.org/wikipedia/commons/thumb/3/35/Deepseek_login_error.png/960px-Deepseek
_login_error.png 2x" width="310"/></a><figcaption>The login error given by DeepSeek
on 28 January 2025 following a cyberattack</figcaption></figure>
<div class="mw-heading mw-heading2"><h2 id="Concerns">Concerns</h2><span class="mw-e
ditsection"><span class="mw-editsection-bracket">[</span><a href="/w/index.php?title
=DeepSeek_(chatbot)&amp;action=edit&amp;section=9" title="Edit section: Concerns"><s
pan>edit</span></a><span class="mw-editsection-bracket">]</span></span></div>
<div class="mw-heading mw-heading3"><h3 id="Distillation">Distillation</h3><span cla
ss="mw-editsection"><span class="mw-editsection-bracket">[</span><a href="/w/index.p
hp?title=DeepSeek_(chatbot)&amp;action=edit&amp;section=10" title="Edit section: Dis
tillation"><span>edit</span></a><span class="mw-editsection-bracket">]</span></span>
</div>
<p>DeepSeek has been reported to sometimes claim that it is ChatGPT.<sup class="refe
rence" id="cite_ref-41"><a href="#cite_note-41"><span class="cite-bracket">[</span>4
0<span class="cite-bracket">]</span></a></sup><sup class="reference" id="cite_ref-4
2"><a href="#cite_note-42"><span class="cite-bracket">[</span>41<span class="cite-br
acket">]</span></a></sup> OpenAI said that DeepSeek may have "inappropriately" used
outputs from its model as training data in a process called <a href="/wiki/Knowledge
_distillation" title="Knowledge distillation">distillation</a>.<sup class="referenc
e" id="cite_ref-43"><a href="#cite_note-43"><span class="cite-bracket">[</span>42<sp
an class="cite-bracket">]</span></a></sup> However, there is currently no method to
prove this conclusively.<sup class="reference" id="cite_ref-44"><a href="#cite_note-
44"><span class="cite-bracket">[</span>43<span class="cite-bracket">]</span></a></su
p>
</p>
<div class="mw-heading mw-heading3"><h3 id="Censorship">Censorship</h3><span class
="mw-editsection"><span class="mw-editsection-bracket">[</span><a href="/w/index.ph
p?title=DeepSeek_(chatbot)&amp;action=edit&amp;section=11" title="Edit section: Cens
orship"><span>edit</span></a><span class="mw-editsection-bracket">]</span></span></d
iv>
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hinese_censorship_abroad" title="Chinese censorship abroad">Chinese censorship abroa
d</a> and <a href="/wiki/Censorship_in_China" title="Censorship in China">Censorship
in China</a></div>
<p>DeepSeek's compliance with Chinese government <a href="/wiki/Chinese_censorship_a
broad" title="Chinese censorship abroad">censorship policies</a> and its <a href="/w
iki/Mass_surveillance_in_China" title="Mass surveillance in China">data collection p
ractices</a> have raised concerns over privacy and information control in the model,
prompting regulatory scrutiny in multiple countries.
</p><p>Reports indicate that it applies content moderation in accordance with the go
vernment's "<a href="/wiki/Public_opinion_guidance" title="Public opinion guidance">
public opinion guidance</a>" regulations, limiting responses on topics such as the <
a href="/wiki/1989_Tiananmen_Square_protests_and_massacre" title="1989 Tiananmen Squ
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are protests and massacre">Tiananmen Square massacre and <a class="mw-redirect"
href="/wiki/Taiwan%27s_political_status" title="Taiwan's political status">Taiwan's
political status.<sup class="reference" id="cite_ref-45"><a href="#cite_note-4
5">[44]</sup
><sup class="reference" id="cite_ref-Lu_20252_46-0"><a href="#cite_note-Lu_20252-4
6">[45]</sup
><sup class="reference" id="cite_ref-47"><span class="cite-b
racket">[46]</sup> DeepSeek models that
have been uncensored also display a bias towards Chinese government viewpoints on co
ntroversial topics such as Xi Jinping
's human rights record and <a class="mw-redirect" href="/wiki/Taiwan%27s_politic
al_status" title="Taiwan's political status">Taiwan's political status.<sup clas
s="reference" id="cite_ref-48">
[47]</sup><sup class="reference" id="ci
te_ref-49">[48<span class
="cite-bracket">]</sup> However, users who have downloaded the models and
hosted them on their own devices and servers have reported successfully removing thi
s censorship.<sup class="reference" id="cite_ref-50"><span c
lass="cite-bracket">[49]</sup><sup clas
s="reference" id="cite_ref-51">
[50]</sup>
</p>
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n" href="/wiki/File:DeepSeek_when_asked_about_Xi_Jinping_and_Narendra_Modi.png"><img
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en_asked_about_Xi_Jinping_and_Narendra_Modi.png/250px-DeepSeek_when_asked_about_Xi_J
inping_and_Narendra_Modi.png" srcset="//upload.wikimedia.org/wikipedia/commons/thum
b/8/8a/DeepSeek_when_asked_about_Xi_Jinping_and_Narendra_Modi.png/500px-DeepSeek_whe
n_asked_about_Xi_Jinping_and_Narendra_Modi.png 1.5x" width="250"/><figcaption>As
ked if Xi Jinping is an autocrat,
DeepSeek apologises that this question is "beyond my current scope". The same questi
on posed about Narendra Modi
returns a "balanced analysis" of viewpoints.</figcaption></figure><p> Some sources h
ave observed that the official application programming interface (API) version of R
1, which runs from servers located in China, uses censorship mechanisms for topics c
onsidered politically sensitive for the <a href="/wiki/Government_of_China" title="G
overnment of China">government of China. For example, the model refuses to answe
r questions about the <a class="mw-redirect" href="/wiki/1989_Tiananmen_Square_massa
cre" title="1989 Tiananmen Square massacre">1989 Tiananmen Square massacre, <a h
ref="/wiki/Persecution_of_Uyghurs_in_China" title="Persecution of Uyghurs in China">
persecution of Uyghurs, <a href="/wiki/Censorship_of_Winnie-the-Pooh_in_China" t
itle="Censorship of Winnie-the-Pooh in China">comparisons between Xi Jinping and Win
nie the Pooh, and <a href="/wiki/Human_rights_in_China" title="Human rights in C
hina">human rights in China.<sup class="reference" id="cite_ref-:3_52-0"><a href
="#cite_note-:3-52">[51<span class="cite-bracke
t">]</sup><sup class="reference" id="cite_ref-tt_53-0"><a href="#cite_not
e-tt-53">[52]</sup><sup class="reference" id="cite_ref-Lu_2025_54-0"><a href="#cite_note-Lu_2025
-54">[53]</s
up> Although the AI may initially generate an answer, it then deletes it shortly aft
erwards and replaces it with a message such as:<sup class="reference" id="cite_ref-t
t_53-1">[52<span class
="cite-bracket">]</sup></p><blockquote><p>"Sorry, that's beyond my curren
t scope. Let's talk about something else."</p></blockquote><p>
The integrated censorship mechanisms and restrictions can only be removed to a limit

ed extent in the open-source version of the R1 model.<sup class="reference" id="cite _ref-:0_55-0">[54]</sup> If the "core Socialist values" defined by the Chinese Internet regulatory authorities are touched on, or the political status of Taiwan is raised, discussions are terminated.<sup class="reference" id="cite_ref -56">[55]</sup> Locally hosted instances of R1 are still reported to pro vide answers consistent with Chinese Communist Party propaganda narratives.<sup class="reference" id="cite_r ef-:0_55-1">[54]</sup> When tested by <i>NBC News</i>, for instance, DeepSeek's R1 described Taiwan as "an inalienable part of China's territory", and stated:<sup class="reference" id="cite_r ef-57">[56]</sup></p><blockquote><p>"We firmly oppose any form of '<a cl ass="mw-redirect" href="/wiki/Taiwan_independence" title="Taiwan independence">Taiwa n independence' separatist activities and are committed to achieving the complet e reunification of the motherland through peaceful means."</p></blockquote>
<p>In January 2025, however, Western researchers were able to trick DeepSeek into gi ving certain answers to some of these topics by requesting in its answer to swap cer tain letters for similar-looking numbers.<sup class="reference" id="cite_ref-Lu_2025_54-1">[53]</sup>
</p>
<div class="mw-heading mw-heading3"><h3 id="Security_and_privacy">Security and priva cy</h3>[edit]</div>
<link href="mw-data:TemplateStyles:r1236090951" rel="mw-deduplicated-inline-style">< div class="hatnote navigation-not-searchable" role="note">See also: Chinese information operations and information war fare</div>
<p>Many experts fear that the government of China could use the AI system for foreig n influence operations, spreading disinformation, surv eillance, and the development of cyberweapons.<sup class="reference" id="cite_ref-58"> [57]</sup><s up class="reference" id="cite_ref-59">[58]</sup><sup class="reference" i d="cite_ref-60">[59]</sup> An article in <i>Wired</i> commented that the DeepSeek online servi ce sending data to its home country might set "the stage for greater scrutiny".<sup class="reference" id="cite_ref-61">[60]</sup>
</p><p>In February 2025, South Korea's data protection regulator, the Personal Information Protection Commission

 (PIPC), raised concerns over DeepSeek, confirming that it sent the nation's user data to the owner of TikTok (ByteDance) in China. Accordingly, the PIPC banned new downloads of the app until DeepSeek addressed these concerns. The company's representative in Korea has partially acknowledged its shortcomings in complying with local data protection laws.^{[61]}^{[62]}

</p><p>On 29 January 2025, cybersecurity researchers from Wiz Research found a significant data breach at DeepSeek. This occurred due to an improper configuration of a cloud storage database that was left available online without any security precautions.The database at oauth2callback.deepseek.com:9000 and dev.deepseek.com:9000 contained more than a million sensitive entries, which comprised chat messages, API keys, operational details from the backend, system logs, and internal metadata from 6 January 2025. The breach was consequential as it provided complete control over the database, which could lead to unauthorized access and increased privileges within DeepSeek's systems. After Wiz Research reported the issue, DeepSeek secured the database in less than an hour, eliminating any immediate risks. However, the exposure sparked serious concerns about DeepSeek's data security practices and the possibility of facing regulatory action under laws like GDPR or CCPA, particularly if the data included personal information from EU or US residents.^{[63]}^{[64]}

</p><p>In April 2025, South Korea's Personal Information Protection Commission announced that DeepSeek had transferred personal information on over a million South Koreans to China without consent.^{[65]}

</p>
<div class="mw-heading mw-heading3"><h3 id="Miscellaneous">Miscellaneous</h3>[edit]</div>
<p><i>The Wall Street Journal</i> reported that the DeepSeek app produces instructions for self-harm and dangerous activities more often than its American competitors.^{[66]} Security researchers have found that DeepSeek sends data to a cloud platform affiliated with ByteDance.^{[67]}^{[68]}

</p><p>In February 2025, sources claimed that DeepSeek began considering raising external funding for the first time, with Alibaba and Chinese state funds expressing interest in investing in DeepSeek.^{[69]}^{[70]} On 21 February, DeepSeek announced plans to release key codes and data to the public starting the following week.<sup class="reference" id="cite_ref-72"><s

pan class="cite-bracket">[71]</sup><sup
class="reference" id="cite_ref-73"><span class="cite-bracke
t">[72]</sup>
</p>
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ss="mw-editsection">[<a href="/w/index.p
hp?title=DeepSeek_(chatbot)&action=edit&section=14" title="Edit section: Res
trictions">edit]
</div>
<p>Many countries have raised concerns about data security and DeepSeek's use of per
sonal data. On 28 January 2025, the Italian data protection authority announced that
it is seeking additional information on DeepSeek's collection and use of personal da
ta.<sup class="reference" id="cite_ref-74"><span class="cite
-bracket">[73]</sup> On the same day, t
he <a href="/wiki/United_States_National_Security_Council" title="United States Nati
onal Security Council">United States National Security Council announced that it
had started a national security review of DeepSeek,<sup class="reference" id="cite_r
ef-75">[74<span class="cit
e-bracket">]</sup> and the <a href="/wiki/United_States_Navy" title="Unit
ed States Navy">United States Navy instructed all its members not to use DeepSee
k due to "security and ethical concerns."<sup class="reference" id="cite_ref-76"><a
href="#cite_note-76">[75<span class="cite-bracke
t">]</sup> On 30 January 2025, Italy's data protection authority, ordered
DeepSeek to block its chatbot in the country after the Chinese artificial intelligen
ce startup failed to address the regulator's concerns over its privacy policy. Itali
an users who downloaded DeepSeek on mobile devices before the ban reported being abl
e to use the chatbot and having access to the web version of DeepSeek after the ban.
<sup class="reference" id="cite_ref-77"><span class="cite-br
acket">[76]</sup>
</p><p>Three days later, South Korea's <a href="/wiki/Personal_Information_Protectio
n_Commission_(South_Korea)" title="Personal Information Protection Commission (South
Korea)">Personal Information Protection Commission opened an inquiry into DeepSe
ek's use of personal information;<sup class="reference" id="cite_ref-Reuters-2025_78
-0">[77]</sup> the <a href="/wiki/Dutch_Data_Protection_Aut
hority" title="Dutch Data Protection Authority">Dutch Data Protection Authority
launched an investigation of DeepSeek;<sup class="reference" id="cite_ref-79"><a hre
f="#cite_note-79">[78]
</sup> Taiwan's digital ministry advised its government departments again
st using the DeepSeek service to "prevent information security risks";<sup class="re
ference" id="cite_ref-Reuters-2025_78-1">[77]</sup> and Te
xas Governor Greg Abbott issued
a state ban on government-issued devices for DeepSeek, along with <a href="/wiki/Xia
ohongshu" title="Xiaohongshu">Xiaohongshu and <a href="/wiki/Lemon8" title="Lemo
n8">Lemon8.<sup class="reference" id="cite_ref-80">[79]</sup>
</p><p>In February 2025, access to DeepSeek was banned on the New South Wales <a hre
f="/wiki/Department_of_Customer_Service" title="Department of Customer Service">Depa
rtment of Customer Service's devices.<sup class="reference" id="cite_ref-81"><a
href="#cite_note-81">[80<span class="cite-bracke
t">]</sup> That same month, Australia, South Korea, and Canada banned Dee
pSeek from government devices,<sup class="reference" id="cite_ref-82"><a href="#cite
_note-82">[81]</
a></sup><sup class="reference" id="cite_ref-83"><span class
="cite-bracket">[82]</sup><sup class="r

eference" id="cite_ref-84">[83]</sup> and South Korea suspended new downloads of DeepSeek due to risks of personal information misuse.^{[84]} In March 2025, the U.S. Department of Commerce prohibited DeepSeek on their government devices, due to the danger of disclosing proprietary information with the Chinese Communist Party.^{[85]}
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<li class="portalbox-entry">China portal
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</sup></a> <a href="#cite_ref-Metz-2025b_2-3"><sup><i><b>d</b></i></sup></a> <a href
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```

news cs1" id="CITEREFMetzTobin2025">Metz, Cade; Tobin, Meaghan (23 January 2025). <a
class="external text" href="https://www.nytimes.com/2025/01/23/technology/deepseek-c
hina-ai-chips.html" rel="nofollow">"How Chinese A.I. Start-Up DeepSeek Is Competing
With Silicon Valley Giants". <i><a href="/wiki/The_New_York_Times" title="The Ne
w York Times">The New York Times</i>. <a class="mw-redirect" href="/wiki/ISSN_(i
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2025/01/23/technology/deepseek-china-ai-chips.html" rel="nofollow">Archived from
the original on 23 January 2025. Retrieved 27 January 2025.</cite><span class="Z3988" title="ctx_v
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pan>

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-0">^{<i>a</i>} <sup><i>b</i>
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238218222" rel="mw-deduplicated-inline-style"><cite class="citation web cs1" id="CIT
EREFZahn2025">Zahn, Max (27 January 2025). <a class="external text" href="https://ab
cnews.go.com/Business/nvidia-microsoft-shares-tumble-china-based-ai-app/story?id=118
136157" rel="nofollow">"Nvidia, Microsoft shares tumble as China-based AI app DeepSe
ek hammers tech giants". <i><a href="/wiki/ABC_News_(United_States)" title="ABC
News (United States)">ABC News</i>. Retrieved
27 January 2025.</cite><span class="Z3988" title
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s://www.weforum.org/stories/2025/02/open-source-ai-innovation-deepseek/

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d2025">Field, Hayden (27 January 2025). <a class="external text" href="https://www.c
nbc.com/2025/01/27/chinas-deepseek-ai-tops-chatgpt-app-store-what-you-should-know.ht
ml" rel="nofollow">"China's DeepSeek AI dethrones ChatGPT on App Store: Here's what
you should know". <i>CNBC</i>. <a class="e
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2025/01/27/chinas-deepseek-ai-tops-chatgpt-app-store-what-you-should-know.html" rel

="nofollow">Archived from the original on 28 January 2025. Retrieved 4 February 2025.</cite></link>

<li id="cite_note-Picchi-7">^ <link href="mw-data:TemplateStyles:r1238218222" rel="mw-deduplicated-inline-style"><cite class="citation web cs1" id="CITEREFPicchi2025">Picchi, Aimee (27 January 2025). "What is DeepSeek, and why is it causing Nvidia and other stocks to slump?". <i>CBS News</i>. Archived from the original on 29 January 2025. Retrieved 4 February 2025.</cite></link>

<li id="cite_note-8">^ <link href="mw-data:TemplateStyles:r1238218222" rel="mw-deduplicated-inline-style"><cite class="citation news cs1" id="CITEREFKerr2025">Kerr, Dara (27 January 2025). "DeepSeek hit with 'large-scale' cyber-attack after AI chatbot tops app stores". <i>The Guardian</i>. Retrieved 28 January 2025.</cite></link>

<li id="cite_note-9">^ <link href="mw-data:TemplateStyles:r1238218222" rel="mw-deduplicated-inline-style"><cite class="citation web cs1" id="CITEREFTweedieAltchek2025">Tweedie, Steven; Altchek, Ana (27 January 2025). "DeepSeek temporarily limited new sign-ups, citing 'large-scale malicious attacks'". <i>Business Insider</i>. Archived from the original on 2 February 2025. Retrieved <spa

n class="nowrap">4 February 2025.</cite><span class="Z3988" title="ctx
_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genr
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 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"><cite class="citation news cs1" id="CITEREFS
hen2025">Shen, Xinmei (6 April 2025). <a class="external text" href="https://www.scm
p.com/tech/tech-trends/article/3305259/deepseek-unveils-new-ai-reasoning-method-anti
cipation-its-next-gen-model-rises?module=perpetual_scroll_0&pgtype=article" rel
="nofollow">"DeepSeek unveils new AI reasoning method as anticipation for its next-g
en model rises". <i>South China Morning Post</i><span class="reference-accessdat
e">. Retrieved 6 April 2025.</cite><span class="Z
3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajour
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Peng; Liu, Yang; Wu, Yu (3 April 2025). "Inference-Time Scaling for Generalist Rewar
d Modeling". <a class="mw-redirect" href="/wiki/ArXiv_(identifier)" title="ArXiv (id
entifier)">arXiv:<a class
="external text" href="https://arxiv.org/abs/2504.02495" rel="nofollow">2504.02495</
a> [<a class="external text" href="https://arxiv.org/archive/cs.CL" rel="nofo
llow">cs.CL].</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_f
mt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=preprint&rft.jtitle=arXi
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2025-04-03&rft_id=info%3Aarxiv%2F2504.02495&rft.aulast=Liu&rft.aufirst=Z
ijun&rft.au=Wang%2C+Peiyi&rft.au=Xu%2C+Runxin&rft.au=Ma%2C+Shirong&r
ft.au=Ruan%2C+Chong&rft.au=Li%2C+Peng&rft.au=Liu%2C+Yang&rft.au=Wu%2C+Yu
&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></link></
span>

<li id="cite_note-12">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFW
iggers2025">Wiggers, Kyle (30 April 2025). <a class="external text" href="https://te
chcrunch.com/2025/04/30/deepseek-upgrades-its-ai-model-for-math-problem-solving/" re
l="nofollow">"DeepSeek upgrades its math-focused AI model Prover". <i>TechCrunch
</i>. Retrieved 30 April</sp
an> 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fm
t=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&rft.jtitle=TechCr
unch&rft.atitle=DeepSeek+upgrades+its+math-focused+AI+model+Prover&rft.date=
2025-04-30&rft.aulast=Wiggers&rft.aufirst=Kyle&rft_id=https%3A%2F%2Ftech

```
crunch.com%2F2025%2F04%2F30%2Fdeepseek-upgrades-its-ai-model-for-math-problem-solvin
g%2F&amp;rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></span></spa
n>
</li>
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</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1"><a class="ex
ternal text" href="https://www.scmp.com/tech/tech-trends/article/3308566/deepseek-qu
ietly-updates-open-source-model-handles-maths-proofs" rel="nofollow">"DeepSeek quiet
ly updates open-source model that handles maths proofs"</a>. <i>South China Morning
Post</i>. 30 April 2025<span class="reference-accessdate">. Retrieved <span class="n
owrap">30 April</span> 2025</span>.</cite><span class="Z3988" title="ctx_ver=Z39.88-
2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&amp;rft.genre=unknown&am
p;rft.jtitle=South+China+Morning+Post&amp;rft.atitle=DeepSeek+quietly+updates+open-s
ource+model+that+handles+maths+proofs&amp;rft.date=2025-04-30&amp;rft_id=https%3A%2
F%2Fwww.scmp.com%2Ftech%2Ftech-trends%2Farticle%2F3308566%2Fdeepseek-quietly-updates
-open-source-model-handles-maths-proofs&amp;rfr_id=info%3Asid%2Fen.wikipedia.org%3AD
eepSeek+%28chatbot%29"></span></span>
</li>
<li id="cite_note-DeepSeekPriceComparison-14"><span class="mw-cite-backlink">^ <a hr
ef="#cite_ref-DeepSeekPriceComparison_14-0"><sup><i><b>a</b></i></sup></a> <a href
="#cite_ref-DeepSeekPriceComparison_14-1"><sup><i><b>b</b></i></sup></a></span> <spa
n class="reference-text"><link href="mw-data:TemplateStyles:r1238218222" rel="mw-ded
uplicated-inline-style"/><cite class="citation news cs1"><a class="external text" hr
ef="https://economictimes.indiatimes.com/magazines/panache/deepseek-or-chatgpt-a-pri
ce-to-performance-comparison-what-you-need-to-know/articleshow/117636306.cms" rel="n
ofollow">"DeepSeek or ChatGPT? A price-to-performance comparison. What you need to k
now"</a>. <i>The Economic Times</i><span class="reference-accessdate">. Retrieved <s
pan class="nowrap">4 April</span> 2025</span>.</cite><span class="Z3988" title="ctx_
ver=Z39.88-2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&amp;rft.genre
=article&amp;rft.jtitle=The+Economic+Times&amp;rft.atitle=DeepSeek+or+ChatGPT%3F+A+p
rice-to-performance+comparison.+What+you+need+to+know&amp;rft_id=https%3A%2F%2Fecono
mictimes.indiatimes.com%2Fmagazines%2Fpanache%2Fdeepseek-or-chatgpt-a-price-to-perfo
rmance-comparison-what-you-need-to-know%2Farticleshow%2F117636306.cms&amp;rfr_id=inf
o%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></span></span>
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</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1"><a class="ex
ternal text" href="https://api-docs.deepseek.com/quick_start/pricing" rel="nofollo
w">"API Pricing"</a>. <i>DeepSeek API Documentation</i><span class="reference-access
date">. Retrieved <span class="nowrap">4 April</span> 2025</span>.</cite><span class
="Z3988" title="ctx_ver=Z39.88-2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Aj
ournal&amp;rft.genre=unknown&amp;rft.jtitle=DeepSeek+API+Documentation&amp;rft.atitl
e=API+Pricing&amp;rft_id=https%3A%2F%2Fapi-docs.deepseek.com%2Fquick_start%2Fpricing
&amp;rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></span></span>
</li>
<li id="cite_note-Deng,_Chengqi-2024-16"><span class="mw-cite-backlink">^ <a href="#
cite_ref-Deng,_Chengqi-2024_16-0"><sup><i><b>a</b></i></sup></a> <a href="#cite_ref-
Deng,_Chengqi-2024_16-1"><sup><i><b>b</b></i></sup></a></span> <span class="referenc
e-text"><link href="mw-data:TemplateStyles:r1238218222" rel="mw-deduplicated-inline-
style"/><cite class="citation arxiv cs1" id="CITEREFDeepSeek-AILiuFengXue2024">DeepS
eek-AI; et al. (2024). "DeepSeek-V3 Technical Report". <a class="mw-redirect" href
="/wiki/ArXiv_(identifier)" title="ArXiv (identifier)">arXiv</a>:<span class="id-loc
k-free" title="Freely accessible"><a class="external text" href="https://arxiv.org/a
bs/2412.19437" rel="nofollow">2412.19437</a></span> [<a class="external text" href
```

="https://arxiv.org/archive/cs.CL" rel="nofollow">cs.CL].</cite><span class="Z39
88" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajourna
l&rft.genre=preprint&rft.jtitle=arXiv&rft.atitle=DeepSeek-V3+Technical+R
eport&rft.date=2024&rft_id=info%3Aarxiv%2F2412.19437&rft.au=DeepSeek-AI&
amp;rft.au=Liu%2C+Aixin&rft.au=Feng%2C+Bei&rft.au=Xue%2C+Bing&rft.au=Wan
g%2C+Bingxuan&rft.au=Wu%2C+Bochao&rft.au=Lu%2C+Chengda&rft.au=Zhao%2C+Ch
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angyun&rft.au=Dai%2C+Fucong&rft.au=Luo%2C+Fuli&rft.au=Hao%2C+Guangbo&am
p;rft.au=Chen%2C+Guanting&rft.au=Li%2C+Guowei&rft.au=Zhang%2C+H.&rft.au=
Bao%2C+Han&rft.au=Xu%2C+Hanwei&rft.au=Wang%2C+Haocheng&rft.au=Zhang%2C+H
aowei&rft.au=Ding%2C+Honghui&rft.au=Xin%2C+Huajian&rfr_id=info%3Asid%2Fe
n.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-:1-17"><a href="#cite_ref-:1_17-
0">^ <link href="mw-data:TemplateStyles:
r1238218222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id
="CITEREFRoose2025">Roose, Kevin (28 January 2025). <a class="external text" href="h
ttps://www.nytimes.com/2025/01/28/technology/why-deepseek-could-change-what-silicon-
valley-believes-about-ai.html" rel="nofollow">"Why DeepSeek Could Change What Silico
n Valley Believe About A.I." <i><a href="/wiki/The_New_York_Times" title="The Ne
w York Times">The New York Times</i>. <a class="mw-redirect" href="/wiki/ISSN_(i
dentifier)" title="ISSN (identifier)">ISSN <a class="external text" href="http
s://search.worldcat.org/issn/0362-4331" rel="nofollow">0362-4331<span class="ref
erence-accessdate">. Retrieved 28 January 2025.</
cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffm
t%3Akev%3Amtx%3Ajournal&rft.genre=article&rft.jtitle=The+New+York+Times&
rft.atitle=Why+DeepSeek+Could+Change+What+Silicon+Valley+Believe+About+A.I.&rft.
date=2025-01-28&rft.issn=0362-4331&rft.aulast=Roose&rft.aufirst=Kevin&am
p;rft_id=https%3A%2F%2Fwww.nytimes.com%2F2025%2F01%2F28%2Ftechnology%2Fwhy-deepseek-
could-change-what-silicon-valley-believes-about-ai.html&rfr_id=info%3Asid%2Fen.w
ikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-18">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1"><a class="e
xternal text" href="https://www.reuters.com/technology/artificial-intelligence/chine
se-ai-startup-deepseek-overtakes-chatgpt-apple-app-store-2025-01-27/" rel="nofollo
w">"Chinese AI startup DeepSeek overtakes ChatGPT on Apple App Store". <i><a hre
f="/wiki/Reuters" title="Reuters">Reuters</i>. 27 January 2025<span class="refer
ence-accessdate">. Retrieved 27 January 2025.</ci
te><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3
Akev%3Amtx%3Ajournal&rft.genre=article&rft.jtitle=Reuters&rft.atitle=Chi
nese+AI+startup+DeepSeek+overtakes+ChatGPT+on+Apple+App+Store&rft.date=2025-01-2
7&rft_id=https%3A%2F%2Fwww.reuters.com%2Ftechnology%2Fartificial-intelligence%2F
chinese-ai-startup-deepseek-overtakes-chatgpt-apple-app-store-2025-01-27%2F&rfr_
id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-19">^
 <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id="CITEREF
Wade2024">Wade, David (6 December 2024). <a class="external text" href="https://theh
ill.com/opinion/technology/5024271-ai-sputnik-moment-china-challenge/" rel="nofollo
w">"American AI has reached its Sputnik moment". <i><a href="/wiki/The_Hill_(new
spaper)" title="The Hill (newspaper)">The Hill</i>. <a class="external text" hre

```
f="https://web.archive.org/web/20241208215538/https://thehill.com/opinion/technolog
y/5024271-ai-sputnik-moment-china-challenge/" rel="nofollow">Archived</a> from the o
riginal on 8 December 2024<span class="reference-accessdate">. Retrieved <span class
="nowrap">25 January</span> 2025</span>.</cite><span class="Z3988" title="ctx_ver=Z3
9.88-2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&amp;rft.genre=artic
le&amp;rft.jtitle=The+Hill&amp;rft.atitle=American+AI+has+reached+its+Sputnik+moment
&amp;rft.date=2024-12-06&amp;rft.aulast=Wade&amp;rft.aufirst=David&amp;rft_id=https%
3A%2F%2Fthehill.com%2Fopinion%2Ftechnology%2F5024271-ai-sputnik-moment-china-challen
ge%2F&amp;rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></span></sp
an>
</li>
<li id="cite_note-Milmo-2025-20"><span class="mw-cite-backlink">^ <a href="#cite_ref
-Milmo-2025_20-0"><sup><i><b>a</b></i></sup></a> <a href="#cite_ref-Milmo-2025_20-
1"><sup><i><b>b</b></i></sup></a> <a href="#cite_ref-Milmo-2025_20-2"><sup><i><b>c</
b></i></sup></a></span> <span class="reference-text"><link href="mw-data:TemplateSty
les:r1238218222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1"
id="CITEREFMilmoHawkinsBoothKollewe2025">Milmo, Dan; Hawkins, Amy; Booth, Robert; Ko
llewe, Julia (28 January 2025). <a class="external text" href="https://www.theguardi
an.com/business/2025/jan/27/tech-shares-asia-europe-fall-china-ai-deepseek" rel="nof
ollow">"<span class="cs1-kern-left"></span>'Sputnik moment': $1tn wiped off US stock
s after Chinese firm unveils AI chatbot"</a>. <i><a href="/wiki/The_Guardian" title
="The Guardian">The Guardian</a></i>.</cite><span class="Z3988" title="ctx_ver=Z39.8
8-2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&amp;rft.genre=unknown&
amp;rft.jtitle=The+Guardian&amp;rft.atitle=%27Sputnik+moment%27%3A+%241tn+wiped+off+
US+stocks+after+Chinese+firm+unveils+AI+chatbot&amp;rft.date=2025-01-28&amp;rft.aula
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p;rft.au=Kollewe%2C+Julia&amp;rft_id=https%3A%2F%2Fwww.theguardian.com%2Fbusiness%2F
2025%2Fjan%2F27%2Ftech-shares-asia-europe-fall-china-ai-deepseek&amp;rfr_id=info%3As
id%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></span></span>
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-Hoskins_RJ_21-0"><sup><i><b>a</b></i></sup></a> <a href="#cite_ref-Hoskins_RJ_21-
1"><sup><i><b>b</b></i></sup></a> <a href="#cite_ref-Hoskins_RJ_21-2"><sup><i><b>c</
b></i></sup></a></span> <span class="reference-text"><link href="mw-data:TemplateSty
les:r1238218222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1"
id="CITEREFHoskinsRahman-Jones2025">Hoskins, Peter; Rahman-Jones, Imran (27 January
2025). <a class="external text" href="https://www.bbc.com/news/articles/c0qw7z2v1pg
o" rel="nofollow">"Nvidia shares sink as Chinese AI app spooks markets"</a>. <i><a h
ref="/wiki/BBC" title="BBC">BBC</a></i>. <a class="external text" href="https://web.
archive.org/web/20250128001127/https://www.bbc.com/news/articles/c0qw7z2v1pgo" rel
="nofollow">Archived</a> from the original on 28 January 2025<span class="reference-
accessdate">. Retrieved <span class="nowrap">28 January</span> 2025</span>.</cite><s
pan class="Z3988" title="ctx_ver=Z39.88-2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%
3Amtx%3Ajournal&amp;rft.genre=unknown&amp;rft.jtitle=BBC&amp;rft.atitle=Nvidia+share
s+sink+as+Chinese+AI+app+spooks+markets&amp;rft.date=2025-01-27&amp;rft.aulast=Hoski
ns&amp;rft.aufirst=Peter&amp;rft.au=Rahman-Jones%2C+Imran&amp;rft_id=https%3A%2F%2Fw
ww.bbc.com%2Fnews%2Farticles%2Fc0qw7z2v1pgo&amp;rfr_id=info%3Asid%2Fen.wikipedia.or
g%3ADeepSeek+%28chatbot%29"></span></span>
</li>
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0"><sup><i><b>a</b></i></sup></a> <a href="#cite_ref-:2_22-1"><sup><i><b>b</b></i></
sup></a> <a href="#cite_ref-:2_22-2"><sup><i><b>c</b></i></sup></a></span> <span cla
ss="reference-text"><link href="mw-data:TemplateStyles:r1238218222" rel="mw-deduplic
ated-inline-style"/><cite class="citation news cs1" id="CITEREFTobinFu2025">Tobin, M
eaghan; Fu, Claire (18 March 2025). <a class="external text" href="https://www.nytim
es.com/2025/03/18/business/china-government-deepseek.html" rel="nofollow">"From Cour
```

trooms to Crisis Lines, Chinese Officials Embrace DeepSeek". <i>The New York Tim
es</i>. <a class="mw-redirect" href="/wiki/ISSN_(identifier)" title="ISSN (identifie
r)">ISSN <a class="external text" href="https://search.worldcat.org/issn/0362-43
31" rel="nofollow">0362-4331. Retrieved 10 April 2025.</cite><span class="Z3988" title="ctx_ver
=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=ar
ticle&rft.jtitle=The+New+York+Times&rft.atitle=From+Courtrooms+to+Crisis+Lin
es%2C+Chinese+Officials+Embrace+DeepSeek&rft.date=2025-03-18&rft.issn=0362-4
331&rft.aulast=Tobin&rft.aufirst=Meaghan&rft.au=Fu%2C+Claire&rft_id=
https%3A%2F%2Fwww.nytimes.com%2F2025%2F03%2F18%2Fbusiness%2Fchina-government-deepsee
k.html&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></s
pan>

<li id="cite_note-23">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFG
oldman2025">Goldman, David (27 January 2025). <a class="external text" href="http
s://www.cnn.com/2025/01/27/tech/deepseek-ai-explainer/index.html" rel="nofollow">"Wh
at is DeepSeek, the Chinese AI startup that shook the tech world? | CNN Business". <i>CNN</i>. <a class="external text" href="ht
tps://web.archive.org/web/20250129183147/https://www.cnn.com/2025/01/27/tech/deepsee
k-ai-explainer/index.html" rel="nofollow">Archived from the original on 29 Janua
ry 2025. Retrieved 29 Januar
y 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_v
al_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&rft.jtitle=C
NN&rft.atitle=What+is+DeepSeek%2C+the+Chinese+AI+startup+that+shook+the+tech+wor
ld%3F+%7C+CNN+Business&rft.date=2025-01-27&rft.aulast=Goldman&rft.aufirs
t=David&rft_id=https%3A%2F%2Fwww.cnn.com%2F2025%2F01%2F27%2Ftech%2Fdeepseek-ai-e
xplainer%2Findex.html&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbo
t%29">

<li id="cite_note-24">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1"><span class
="id-lock-subscription" title="Paid subscription required"><a class="external text"
href="https://www.economist.com/business/2025/01/29/deepseek-poses-a-challenge-to-be
ijing-as-much-as-to-silicon-valley" rel="nofollow">"DeepSeek poses a challenge to Be
ijing as much as to Silicon Valley". <i><a href="/wiki/The_Economist" tit
le="The Economist">The Economist</i>. 29 January 2025. <a class="mw-redirect" hr
ef="/wiki/ISSN_(identifier)" title="ISSN (identifier)">ISSN <a class="external t
ext" href="https://search.worldcat.org/issn/0013-0613" rel="nofollow">0013-0613.
<a class="external text" href="https://web.archive.org/web/20250131042816/https://ww
w.economist.com/business/2025/01/29/deepseek-poses-a-challenge-to-beijing-as-much-as
-to-silicon-valley" rel="nofollow">Archived from the original on 31 January 2025
. Retrieved 31 January 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=
info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=article&rft.jtitle=The+Econ
omist&rft.atitle=DeepSeek+poses+a+challenge+to+Beijing+as+much+as+to+Silicon+Val
ley&rft.date=2025-01-29&rft.issn=0013-0613&rft_id=https%3A%2F%2Fwww.econ
omist.com%2Fbusiness%2F2025%2F01%2F29%2Fdeepseek-poses-a-challenge-to-beijing-as-muc
h-as-to-silicon-valley&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbo
t%29">

<li id="cite_note-25">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id="CITEREF

PaulNellis2025">Paul, Katie; Nellis, Stephen (30 January 2025). <a class="external t
ext" href="https://www.reuters.com/technology/artificial-intelligence/chinese-state-
linked-accounts-hyped-deepseek-ai-launch-ahead-us-stock-rout-2025-01-31/" rel="nofol
low">"Chinese state-linked accounts hyped DeepSeek AI launch ahead of US stock rout,
Graphika says". <i>Reuters</i>. Retrieved 30 January 2025
.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3
Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=article&rft.jtitle=Reuters&rf
t.atitle=Chinese+state-linked+accounts+hyped+DeepSeek+AI+launch+ahead+of+US+stock+ro
ut%2C+Graphika+says&rft.date=2025-01-30&rft.aulast=Paul&rft.aufirst=Kati
e&rft.au=Nellis%2C+Stephen&rft_id=https%3A%2F%2Fwww.reuters.com%2Ftechnolog
y%2Fartificial-intelligence%2Fchinese-state-linked-accounts-hyped-deepseek-ai-launch
-ahead-us-stock-rout-2025-01-31%2F&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSe
ek+%28chatbot%29">

<li id="cite_note-26">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREF
江钰涵2025">江钰涵 (22 January 2025). <a class="external text" href="https://finance.
sina.com.cn/jjxw/2025-01-22/doc-inefuxsi7314244.shtml" rel="nofollow">"量化巨头幻方创
始人梁文锋参加总理座谈会并发言，他还创办了"AI界拼多多"</spa
n>". <i>Sina Cor
p</i>. <a class="external text" href="https://web.archive.org/web/2025012614222
6/https://finance.sina.com.cn/jjxw/2025-01-22/doc-inefuxsi7314244.shtml" rel="nofoll
ow">Archived from the original on 26 January 2025<span class="reference-accessda
te">. Retrieved 31 January 2025.</cite><span clas
s="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3A
journal&rft.genre=unknown&rft.jtitle=Sina+Corp&rft.atitle=%E9%87%8F%E5%8
C%96%E5%B7%A8%E5%A4%B4%E5%B9%BB%E6%96%B9%E5%88%9B%E5%A7%8B%E4%BA%BA%E6%A2%81%E6%96%8
7%E9%94%8B%E5%8F%82%E5%8A%A0%E6%80%BB%E7%90%86%E5%BA%A7%E8%B0%88%E4%BC%9A%E5%B9%B6%E
5%8F%91%E8%A8%80%2C+%E4%BB%96%E8%BF%98%E5%88%9B%E5%8A%9E%E4%BA%86%22AI%E7%95%8C%E6%8
B%BC%E5%A4%9A%E5%A4%9A%22&rft.date=2025-01-22&rft.au=%E6%B1%9F%E9%92%B0%E6%B
6%B5&rft_id=https%3A%2F%2Ffinance.sina.com.cn%2Fjjxw%2F2025-01-22%2Fdoc-inefuxsi
7314244.shtml&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></s
pan>

<li id="cite_note-DSCI_1-27">^ <a href="#cite_ref-DSC
I_1_27-0">^{<i>a</i>} <sup><i>
b</i></sup> <link href="mw-data:Template
Styles:r1238218222" rel="mw-deduplicated-inline-style"/><cite class="citation magazi
ne cs1" id="CITEREFSherry2025">Sherry, Ben (28 January 2025). <a class="external tex
t" href="https://www.inc.com/ben-sherry/ai-leaders-in-the-u-s-react-to-deepseek-call
ing-it-impressive-but-staying-skeptical/91140125" rel="nofollow">"DeepSeek, Calling
It 'Impressive' but Staying Skeptical". <i><a href="/wiki/Inc._(magazine)" title
="Inc. (magazine)">Inc.</i> <a class="external text" href="https://web.archive.o
rg/web/20250129211401/https://www.inc.com/ben-sherry/ai-leaders-in-the-u-s-react-to-
deepseek-calling-it-impressive-but-staying-skeptical/91140125" rel="nofollow">Archiv
ed from the original on 29 January 2025. Retr
ieved 29 January 2025.</cite><span class="Z3988"
title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&am
p;rft.genre=article&rft.jtitle=Inc.&rft.atitle=DeepSeek%2C+Calling+It+%27Imp
ressive%27+but+Staying+Skeptical&rft.date=2025-01-28&rft.aulast=Sherry&r
ft.aufirst=Ben&rft_id=https%3A%2F%2Fwww.inc.com%2Fben-sherry%2Fai-leaders-in-the
-u-s-react-to-deepseek-calling-it-impressive-but-staying-skeptical%2F91140125&rf
r_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">


```
<li id="cite_note-28"><span class="mw-cite-backlink"><b><a href="#cite_ref-28">^</a>
</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFO
kemwa2025">Okemwa, Kevin (28 January 2025). <a class="external text" href="https://w
ww.windowscentral.com/software-apps/microsoft-ceo-satya-nadella-touts-deepseeks-open
-source-ai-as-super-impressive" rel="nofollow">"Microsoft CEO Satya Nadella touts De
epSeek's open-source AI as "super impressive": "We should take the developments out
of China very, very seriously"<span class="cs1-kern-right"></span>"</a>. <i><a class
="mw-redirect" href="/wiki/Windows_Central" title="Windows Central">Windows Central
</a></i>. <a class="external text" href="https://web.archive.org/web/20250128095125/
https://www.windowscentral.com/software-apps/microsoft-ceo-satya-nadella-touts-deeps
eeks-open-source-ai-as-super-impressive" rel="nofollow">Archived</a> from the origin
al on 28 January 2025<span class="reference-accessdate">. Retrieved <span class="now
rap">28 January</span> 2025</span>.</cite><span class="Z3988" title="ctx_ver=Z39.88-
2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&amp;rft.genre=unknown&am
p;rft.jtitle=Windows+Central&amp;rft.atitle=Microsoft+CEO+Satya+Nadella+touts+DeepSe
ek%27s+open-source+AI+as+%22super+impressive%22%3A+%22We+should+take+the+development
s+out+of+China+very%2C+very+seriously%22&amp;rft.date=2025-01-28&amp;rft.aulast=Okem
wa&amp;rft.aufirst=Kevin&amp;rft_id=https%3A%2F%2Fwww.windowscentral.com%2Fsoftware-
apps%2Fmicrosoft-ceo-satya-nadella-touts-deepseeks-open-source-ai-as-super-impressiv
e&amp;rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></span></span>
</li>
<li id="cite_note-29"><span class="mw-cite-backlink"><b><a href="#cite_ref-29">^</a>
</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id="CITEREF
Nazzaro2025">Nazzaro, Miranda (28 January 2025). <a class="external text" href="http
s://thehill.com/policy/technology/5110258-openai-rival-deepseek-ai-model/" rel="nofo
llow">"OpenAI's Sam Altman calls DeepSeek model 'impressive'<span class="cs1-kern-ri
ght"></span>"</a>. <i><a href="/wiki/The_Hill_(newspaper)" title="The Hill (newspape
r)">The Hill</a></i>. <a class="external text" href="https://web.archive.org/web/202
50128161932/https://thehill.com/policy/technology/5110258-openai-rival-deepseek-ai-m
odel/" rel="nofollow">Archived</a> from the original on 28 January 2025<span class
="reference-accessdate">. Retrieved <span class="nowrap">28 January</span> 2025</spa
n>.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&amp;rft_val_fmt=info%3Aofi%
2Ffmt%3Akev%3Amtx%3Ajournal&amp;rft.genre=article&amp;rft.jtitle=The+Hill&amp;rft.at
itle=OpenAI%27s+Sam+Altman+calls+DeepSeek+model+%27impressive%27&amp;rft.date=2025-0
1-28&amp;rft.aulast=Nazzaro&amp;rft.aufirst=Miranda&amp;rft_id=https%3A%2F%2Fthehil
l.com%2Fpolicy%2Ftechnology%2F5110258-openai-rival-deepseek-ai-model%2F&amp;rfr_id=i
nfo%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></span></span>
</li>
<li id="cite_note-30"><span class="mw-cite-backlink"><b><a href="#cite_ref-30">^</a>
</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFK
im2025">Kim, Eugene (27 January 2025). <a class="external text" href="https://www.bu
sinessinsider.com/aws-deepseek-customer-cloud-access-bedrock-stripe-toyota-cisco-wor
kday-2025-1" rel="nofollow">"Big AWS customers, including Stripe and Toyota, are hou
nding the cloud giant for access to DeepSeek AI models"</a>. <i><a href="/wiki/Busin
ess_Insider" title="Business Insider">Business Insider</a></i>. <a class="external t
ext" href="https://web.archive.org/web/20250131205127/https://www.businessinsider.co
m/aws-deepseek-customer-cloud-access-bedrock-stripe-toyota-cisco-workday-2025-1" rel
="nofollow">Archived</a> from the original on 31 January 2025<span class="reference-
accessdate">. Retrieved <span class="nowrap">4 February</span> 2025</span>.</cite><s
pan class="Z3988" title="ctx_ver=Z39.88-2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%
3Amtx%3Ajournal&amp;rft.genre=unknown&amp;rft.jtitle=Business+Insider&amp;rft.atitle
=Big+AWS+customers%2C+including+Stripe+and+Toyota%2C+are+hounding+the+cloud+giant+fo
r+access+to+DeepSeek+AI+models&amp;rft.date=2025-01-27&amp;rft.aulast=Kim&amp;rft.au
```

```
first=Eugene&amp;rft_id=https%3A%2F%2Fwww.businessinsider.com%2Faws-deepseek-custome
r-cloud-access-bedrock-stripe-toyota-cisco-workday-2025-1&amp;rfr_id=info%3Asid%2Fe
n.wikipedia.org%3ADeepSeek+%28chatbot%29"></span></span>
</li>
<li id="cite_note-31"><span class="mw-cite-backlink"><b><a href="#cite_ref-31">^</a>
</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id="CITEREF
DouGreggZakrzewskiTiku2025">Dou, Eva; Gregg, Aaron; Zakrzewski, Cat; Tiku, Nitasha;
Najmabadi, Shannon (28 January 2025). <a class="external text" href="https://www.was
hingtonpost.com/business/2025/01/27/deep-seek-ai-markets-nvidia/" rel="nofollow">"Tr
ump calls China's DeepSeek AI app a 'wake-up call' after tech stocks slide"</a>. <i>
<a href="/wiki/The_Washington_Post" title="The Washington Post">The Washington Post
</a></i>. <a class="external text" href="https://web.archive.org/web/20250128030936/
https://www.washingtonpost.com/business/2025/01/27/deep-seek-ai-markets-nvidia/" rel
="nofollow">Archived</a> from the original on 28 January 2025<span class="reference-
accessdate">. Retrieved <span class="nowrap">28 January</span> 2025</span>.</cite><s
pan class="Z3988" title="ctx_ver=Z39.88-2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%
3Amtx%3Ajournal&amp;rft.genre=article&amp;rft.jtitle=The+Washington+Post&amp;rft.ati
tle=Trump+calls+China%27s+DeepSeek+AI+app+a+%27wake-up+call%27+after+tech+stocks+sli
de&amp;rft.date=2025-01-28&amp;rft.aulast=Dou&amp;rft.aufirst=Eva&amp;rft.au=Gregg%2
C+Aaron&amp;rft.au=Zakrzewski%2C+Cat&amp;rft.au=Tiku%2C+Nitasha&amp;rft.au=Najmabad
i%2C+Shannon&amp;rft_id=https%3A%2F%2Fwww.washingtonpost.com%2Fbusiness%2F2025%2F01%
2F27%2Fdeep-seek-ai-markets-nvidia%2F&amp;rfr_id=info%3Asid%2Fen.wikipedia.org%3ADee
pSeek+%28chatbot%29"></span></span>
</li>
<li id="cite_note-32"><span class="mw-cite-backlink"><b><a href="#cite_ref-32">^</a>
</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFH
abeshian2025">Habeshian, Sareen (28 January 2025). <a class="external text" href="ht
tps://www.axios.com/2025/01/28/trump-mike-johnson-china-deepseek-ai" rel="nofollo
w">"Johnson bashes China on AI, Trump calls DeepSeek development "positive"<span cla
ss="cs1-kern-right"></span>"</a>. <i><a href="/wiki/Axios_(website)" title="Axios (w
ebsite)">Axios</a></i>. <a class="external text" href="https://web.archive.org/web/2
0250204083126/https://www.axios.com/2025/01/28/trump-mike-johnson-china-deepseek-ai"
rel="nofollow">Archived</a> from the original on 4 February 2025<span class="referen
ce-accessdate">. Retrieved <span class="nowrap">4 February</span> 2025</span>.</cite
><span class="Z3988" title="ctx_ver=Z39.88-2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Ak
ev%3Amtx%3Ajournal&amp;rft.genre=unknown&amp;rft.jtitle=Axios&amp;rft.atitle=Johnson
+bashes+China+on+AI%2C+Trump+calls+DeepSeek+development+%22positive%22&amp;rft.date=
2025-01-28&amp;rft.aulast=Habeshian&amp;rft.aufirst=Sareen&amp;rft_id=https%3A%2F%2F
www.axios.com%2F2025%2F01%2F28%2Ftrump-mike-johnson-china-deepseek-ai&amp;rfr_id=inf
o%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></span></span>
</li>
<li id="cite_note-33"><span class="mw-cite-backlink"><b><a href="#cite_ref-33">^</a>
</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFK
araianRennison2025">Karaian, Jason; Rennison, Joe (27 January 2025). <a class="exter
nal text" href="https://www.nytimes.com/2025/01/27/business/us-stock-market-deepseek
-ai-sp500-nvidia.html" rel="nofollow">"China's A.I. Advances Spook Big Tech Investor
s on Wall Street"</a>. <i><a class="mw-redirect" href="/wiki/New_York_Times" title
="New York Times">New York Times</a></i>. <a class="external text" href="https://we
b.archive.org/web/20250130192538/https://www.nytimes.com/2025/01/27/business/us-stoc
k-market-deepseek-ai-sp500-nvidia.html" rel="nofollow">Archived</a> from the origina
l on 30 January 2025<span class="reference-accessdate">. Retrieved <span class="nowr
ap">4 February</span> 2025</span>.</cite><span class="Z3988" title="ctx_ver=Z39.88-2
004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&amp;rft.genre=unknown&am
```

p;rft.jtitle=New+York+Times&rft.atitle=China%27s+A.I.+Advances+Spook+Big+Tech+In
vestors+on+Wall+Street&rft.date=2025-01-27&rft.aulast=Karaian&rft.aufirs
t=Jason&rft.au=Rennison%2C+Joe&rft_id=https%3A%2F%2Fwww.nytimes.com%2F2025%2
F01%2F27%2Fbusiness%2Fus-stock-market-deepseek-ai-sp500-nvidia.html&rfr_id=info%
3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-34">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFS
harma2025">Sharma, Manoj (6 January 2025). <a class="external text" href="https://ww
w.fortuneindia.com/technology/musk-dismisses-sam-altman-applauds-heres-what-leaders-
say-on-deepseeks-ai-disruption/120194" rel="nofollow">"Musk dismisses, Altman applau
ds: What leaders say on DeepSeek's disruption". <i><a class="mw-redirect" href
="/wiki/Fortune_India" title="Fortune India">Fortune India</i>. <a class="extern
al text" href="https://web.archive.org/web/20250128140632/https://www.fortuneindia.c
om/technology/musk-dismisses-sam-altman-applauds-heres-what-leaders-say-on-deepseeks
-ai-disruption/120194" rel="nofollow">Archived from the original on 28 January 2
025. Retrieved 28 January</s
pan> 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_f
mt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&rft.jtitle=Fortu
ne+India&rft.atitle=Musk+dismisses%2C+Altman+applauds%3A+What+leaders+say+on+Dee
pSeek%27s+disruption&rft.date=2025-01-06&rft.aulast=Sharma&rft.aufirst=M
anoj&rft_id=https%3A%2F%2Fwww.fortuneindia.com%2Ftechnology%2Fmusk-dismisses-sam
-altman-applauds-heres-what-leaders-say-on-deepseeks-ai-disruption%2F120194&rfr_
id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-35">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFD
hawan2025">Dhawan, Sunil (28 January 2025). <a class="external text" href="https://w
ww.financialexpress.com/business/investing-abroad-deepseek-sparks-debate-did-it-buil
d-cutting-edge-ai-for-6-million-3728638/" rel="nofollow">"Elon Musk 'questions' Deep
Seek's claims, suggests massive Nvidia GPU infrastructure". <i><a href="/wiki/Th
e_Financial_Express_(India)" title="The Financial Express (India)">The Financial Exp
ress</i>. Retrieved 28 J
anuary 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&
rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&rft.jti
tle=The+Financial+Express&rft.atitle=Elon+Musk+%27questions%27+DeepSeek%27s+clai
ms%2C+suggests+massive+Nvidia+GPU+infrastructure&rft.date=2025-01-28&rft.aul
ast=Dhawan&rft.aufirst=Sunil&rft_id=https%3A%2F%2Fwww.financialexpress.com%2
Fbusiness%2Finvesting-abroad-deepseek-sparks-debate-did-it-build-cutting-edge-ai-for
-6-million-3728638%2F&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbo
t%29">

<li id="cite_note-scmp_1_January_2025-36"><a href
="#cite_ref-scmp_1_January_2025_36-0">^
<link href="mw-data:TemplateStyles:r1238218222" rel="mw-deduplicated-inline-style"/>
<cite class="citation web cs1" id="CITEREFJiangPerezi2025">Jiang, Ben; Perezi, Bien
(1 January 2025). <a class="external text" href="https://www.scmp.com/tech/tech-tren
ds/article/3293050/meet-deepseek-chinese-start-changing-how-ai-models-are-trained" r
el="nofollow">"Meet DeepSeek: the Chinese start-up that is changing how AI models ar
e trained". <i><a href="/wiki/South_China_Morning_Post" title="South China Morni
ng Post">South China Morning Post</i>. <a class="external text" href="https://we
b.archive.org/web/20250122160046/https://www.scmp.com/tech/tech-trends/article/32930
50/meet-deepseek-chinese-start-changing-how-ai-models-are-trained" rel="nofollow">Ar
chived from the original on 22 January 2025.

Retrieved 1 January 2025.</cite><span class="Z398
8" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal
&rft.genre=unknown&rft.jtitle=South+China+Morning+Post&rft.atitle=Meet+D
eepSeek%3A+the+Chinese+start-up+that+is+changing+how+AI+models+are+trained&rft.d
ate=2025-01-01&rft.aulast=Jiang&rft.aufirst=Ben&rft.au=Perezi%2C+Bien&am
p;rft_id=https%3A%2F%2Fwww.scmp.com%2Ftech%2Ftech-trends%2Farticle%2F3293050%2Fmeet-
deepseek-chinese-start-changing-how-ai-models-are-trained&rfr_id=info%3Asid%2Fe
n.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-37">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFS
hilov2024">Shilov, Anton (27 December 2024). <a class="external text" href="https://
www.tomshardware.com/tech-industry/artificial-intelligence/chinese-ai-company-says-b
reakthroughs-enabled-creating-a-leading-edge-ai-model-with-11x-less-compute-deepseek
s-optimizations-highlight-limits-of-us-sanctions" rel="nofollow">"Chinese AI compan
y's AI model breakthrough highlights limits of US sanctions". <i><a href="/wiki/
Tom%27s_Hardware" title="Tom's Hardware">Tom's Hardware</i>. <a class="external
text" href="https://web.archive.org/web/20241228014832/https://www.tomshardware.com/
tech-industry/artificial-intelligence/chinese-ai-company-says-breakthroughs-enabled-
creating-a-leading-edge-ai-model-with-11x-less-compute-deepseeks-optimizations-highl
ight-limits-of-us-sanctions" rel="nofollow">Archived from the original on 28 Dec
ember 2024. Retrieved 28 Dec
ember 2024.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&r
ft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&rft.jtit
le=Tom%27s+Hardware&rft.atitle=Chinese+AI+company%27s+AI+model+breakthrough+high
lights+limits+of+US+sanctions&rft.date=2024-12-27&rft.aulast=Shilov&rft.
aufirst=Anton&rft_id=https%3A%2F%2Fwww.tomshardware.com%2Ftech-industry%2Fartifi
cial-intelligence%2Fchinese-ai-company-says-breakthroughs-enabled-creating-a-leading
-edge-ai-model-with-11x-less-compute-deepseeks-optimizations-highlight-limits-of-us-
sanctions&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-38">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1"><a class="ex
ternal text" href="https://www.bbc.co.uk/news/live/cjr85l2e4l4t" rel="nofollow">"Dee
pSeek updates – Chinese AI chatbot sparks US market turmoil, wiping $500bn off Nvidi
a". <i>BBC News</i>. <a class="ext
ernal text" href="https://web.archive.org/web/20250127165452/https://www.bbc.co.uk/n
ews/live/cjr85l2e4l4t" rel="nofollow">Archived from the original on 27 January 2
025. Retrieved 27 January</s
pan> 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_f
mt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&rft.jtitle=BBC+N
ews&rft.atitle=DeepSeek+updates+%E2%80%93+Chinese+AI+chatbot+sparks+US+market+tu
rmoil%2C+wiping+%24500bn+off+Nvidia&rft_id=https%3A%2F%2Fwww.bbc.co.uk%2Fnews%2F
live%2Fcjr85l2e4l4t&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%2
9">

<li id="cite_note-39">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id="CITEREF
Nazareth2025">Nazareth, Rita (26 January 2025). <a class="external text" href="http
s://www.bloomberg.com/news/articles/2025-01-26/asia-eyes-cautious-open-as-tariffs-re
main-in-focus-markets-wrap" rel="nofollow">"Stock Rout Gets Ugly as Nvidia Extends L
oss to 17%: Markets Wrap". <i><a href="/wiki/Bloomberg_L.P." title="Bloomberg L.

P.">Bloomberg L.P.</i> Retrieved <span class
="nowrap">27 January 2025.</cite><span class="Z3988" title="ctx_ver=Z3
9.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=artic
le&rft.jtitle=Bloomberg+L.P.&rft.atitle=Stock+Rout+Gets+Ugly+as+Nvidia+Exten
ds+Loss+to+17%25%3A+Markets+Wrap&rft.date=2025-01-26&rft.aulast=Nazareth&am
p;rft.aufirst=Rita&rft_id=https%3A%2F%2Fwww.bloomberg.com%2Fnews%2Farticles%2F20
25-01-26%2Fasia-eyes-cautious-open-as-tariffs-remain-in-focus-markets-wrap&rfr_i
d=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-40">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFC
arewCooperBanerjee2025">Carew, Sinéad; Cooper, Amanda; Banerjee, Ankur (27 January 2
025). <a class="external text" href="https://www.reuters.com/technology/chinas-deeps
eek-sets-off-ai-market-rout-2025-01-27/" rel="nofollow">"DeepSeek sparks global AI s
elloff, Nvidia losses about $593 billion of value". <i><a href="/wiki/Reuters" t
itle="Reuters">Reuters</i>. <a class="external text" href="https://web.archive.o
rg/web/20250128033924/https://www.reuters.com/technology/chinas-deepseek-sets-off-ai
-market-rout-2025-01-27/" rel="nofollow">Archived from the original on 28 Januar
y 2025. Retrieved 4 February
 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_va
l_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&rft.jtitle=Re
uters&rft.atitle=DeepSeek+sparks+global+AI+selloff%2C+Nvidia+losses+about+%24593
+billion+of+value&rft.date=2025-01-27&rft.aulast=Carew&rft.aufirst=Sin%C
3%A9ad&rft.au=Cooper%2C+Amanda&rft.au=Banerjee%2C+Ankur&rft_id=https%3A%
2F%2Fwww.reuters.com%2Ftechnology%2Fchinas-deepseek-sets-off-ai-market-rout-2025-01-
27%2F&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></sp
an>

<li id="cite_note-41">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREF
O'BrienChan2025">O'Brien, Matt; Chan, Kelvin (29 January 2025). <a class="external t
ext" href="https://apnews.com/article/deepseek-ai-chatgpt-openai-copyright-a94168f3b
8caa51623ce1b75b5ffcc51" rel="nofollow">"Did DeepSeek copy ChatGPT to make new AI ch
atbot? Trump adviser thinks so". <i><a class="mw-redirect" href="/wiki/AP_News"
title="AP News">AP News</i>. Retrieved 4 February 2025.</cite><span class="Z3988" title="ctx_v
er=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=
unknown&rft.jtitle=AP+News&rft.atitle=Did+DeepSeek+copy+ChatGPT+to+make+new+
AI+chatbot%3F+Trump+adviser+thinks+so&rft.date=2025-01-29&rft.aulast=O%27Bri
en&rft.aufirst=Matt&rft.au=Chan%2C+Kelvin&rft_id=https%3A%2F%2Fapnews.co
m%2Farticle%2Fdeepseek-ai-chatgpt-openai-copyright-a94168f3b8caa51623ce1b75b5ffcc51&
amp;rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-42">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFU
lanoff2025">Ulanoff, Lance (30 January 2025). <a class="external text" href="http
s://www.techradar.com/computing/artificial-intelligence/deepseek-just-insisted-its-c
hatgpt-and-i-think-thats-all-the-proof-i-need" rel="nofollow">"DeepSeek just insiste
d it's ChatGPT, and I think that's all the proof I need". <i><a href="/wiki/Tech
Radar" title="TechRadar">TechRadar</i>. Retri
eved 4 February 2025.</cite><span class="Z3988" t
itle="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&am
p;rft.genre=unknown&rft.jtitle=TechRadar&rft.atitle=DeepSeek+just+insisted+i

t%27s+ChatGPT%2C+and+I+think+that%27s+all+the+proof+I+need&rft.date=2025-01-30&a
mp;rft.aulast=Ulanoff&rft.aufirst=Lance&rft_id=https%3A%2F%2Fwww.techradar.c
om%2Fcomputing%2Fartificial-intelligence%2Fdeepseek-just-insisted-its-chatgpt-and-i-
think-thats-all-the-proof-i-need&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek
+%28chatbot%29">

<li id="cite_note-43">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFC
ollierCui2025">Collier, Kevin; Cui, Jasmine (30 January 2025). <a class="external te
xt" href="https://www.nbcnews.com/tech/tech-news/openai-says-deepseek-may-inapproria
tely-used-data-rcna189872" rel="nofollow">"OpenAI says DeepSeek may have 'inapproria
tely' used its data". <i>NBC News
</i>. Retrieved 5 February</
span> 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_
fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&rft.jtitle=NBC+
News&rft.atitle=OpenAI+says+DeepSeek+may+have+%27inapproriately%27+used+its+data
&rft.date=2025-01-30&rft.aulast=Collier&rft.aufirst=Kevin&rft.au=Cu
i%2C+Jasmine&rft_id=https%3A%2F%2Fwww.nbcnews.com%2Ftech%2Ftech-news%2Fopenai-sa
ys-deepseek-may-inapproriately-used-data-rcna189872&rfr_id=info%3Asid%2Fen.wikip
edia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-44">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFF
rermannCohney2025">Frermann, Lea; Cohney, Shaanan (4 February 2025). <a class="exter
nal text" href="https://theconversation.com/openai-says-deepseek-inappropriately-cop
ied-chatgpt-but-its-facing-copyright-claims-too-248863" rel="nofollow">"OpenAI says
DeepSeek 'inappropriately' copied ChatGPT – but it's facing copyright claims too". <i>
The Conversation</i>. Retrieved <span class
="nowrap">11 February 2025.</cite><span class="Z3988" title="ctx_ver=Z
39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unkn
own&rft.jtitle=The+Conversation&rft.atitle=OpenAI+says+DeepSeek+%27inappropr
iately%27+copied+ChatGPT+%E2%80%93+but+it%27s+facing+copyright+claims+too&rft.da
te=2025-02-04&rft.aulast=Frermann&rft.aufirst=Lea&rft.au=Cohney%2C+Shaan
an&rft_id=https%3A%2F%2Ftheconversation.com%2Fopenai-says-deepseek-inappropriate
ly-copied-chatgpt-but-its-facing-copyright-claims-too-248863&rfr_id=info%3Asid%2
Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-45">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id="CITEREF
FieldTitcomb2025">Field, Matthew; Titcomb, James (27 January 2025). <a class="extern
al text" href="https://www.telegraph.co.uk/business/2025/01/27/chinese-deepseek-ai-h
as-sparked-a-1-trillion-panic/" rel="nofollow">"Chinese AI has sparked a $1 trillion
panic – and it doesn't care about free speech". <i><a href="/wiki/The_Daily_Tele
graph" title="The Daily Telegraph">The Daily Telegraph</i>. <a class="mw-redirec
t" href="/wiki/ISSN_(identifier)" title="ISSN (identifier)">ISSN <a class="exter
nal text" href="https://search.worldcat.org/issn/0307-1235" rel="nofollow">0307-1235
. Retrieved 27 January</
span> 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_
fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=article&rft.jtitle=The+
Daily+Telegraph&rft.atitle=Chinese+AI+has+sparked+a+%241+trillion+panic+%E2%80%9
3+and+it+doesn%27t+care+about+free+speech&rft.date=2025-01-27&rft.issn=0307-
1235&rft.aulast=Field&rft.aufirst=Matthew&rft.au=Titcomb%2C+James&rf

t_id=https%3A%2F%2Fwww.telegraph.co.uk%2Fbusiness%2F2025%2F01%2F27%2Fchinese-deepsee
k-ai-has-sparked-a-1-trillion-panic%2F&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADe
epSeek+%28chatbot%29">

<li id="cite_note-Lu_20252-46"><a href="#cite_ref-
Lu_20252_46-0">^ <link href="mw-data:Tem
plateStyles:r1238218222" rel="mw-deduplicated-inline-style"/><cite class="citation w
eb cs1" id="CITEREFLu2025">Lu, Donna (28 January 2025). <a class="external text" hre
f="https://www.theguardian.com/technology/2025/jan/28/we-tried-out-deepseek-it-works
-well-until-we-asked-it-about-tiananmen-square-and-taiwan" rel="nofollow">"We tried
out DeepSeek. It worked well, until we asked it about Tiananmen Square and Taiwan"</
a>. <i>The Guardian</i>. <a cl
ass="mw-redirect" href="/wiki/ISSN_(identifier)" title="ISSN (identifier)">ISSN <a class="external text" href="https://search.worldcat.org/issn/0261-3077" rel="no
follow">0261-3077. Retrieved <span class="now
rap">30 January 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-
2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&am
p;rft.jtitle=The+Guardian&rft.atitle=We+tried+out+DeepSeek.+It+worked+well%2C+un
til+we+asked+it+about+Tiananmen+Square+and+Taiwan&rft.date=2025-01-28&rft.is
sn=0261-3077&rft.aulast=Lu&rft.aufirst=Donna&rft_id=https%3A%2F%2Fwww.th
eguardian.com%2Ftechnology%2F2025%2Fjan%2F28%2Fwe-tried-out-deepseek-it-works-well-u
ntil-we-asked-it-about-tiananmen-square-and-taiwan&rfr_id=info%3Asid%2Fen.wikipe
dia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-47">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id="CITEREF
Colville2025">Colville, Alex (25 April 2025). <a class="external text" href="http
s://jamestown.org/program/deepseek-a-tool-tuned-for-social-governance/" rel="nofollo
w">"DeepSeek: A Tool Tuned for Social Governance". <i>China Brief</i>. <a href
="/wiki/Jamestown_Foundation" title="Jamestown Foundation">Jamestown Foundation<
span class="reference-accessdate">. Retrieved 26 April 2
025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=inf
o%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=article&rft.jtitle=China+Brief
&rft.atitle=DeepSeek%3A+A+Tool+Tuned+for+Social+Governance&rft.date=2025-04-
25&rft.aulast=Colville&rft.aufirst=Alex&rft_id=https%3A%2F%2Fjamestown.o
rg%2Fprogram%2Fdeepseek-a-tool-tuned-for-social-governance%2F&rfr_id=info%3Asid%
2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-48">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFC
olville2025">Colville, Alex (10 February 2025). <a class="external text" href="http
s://chinamediaproject.org/2025/02/10/deepseeking-truth/" rel="nofollow">"DeepSeeking
Truth". <i>China Media Project</i>. Retrieved
12 February 2025.</cite><span class="Z3988" title
="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rf
t.genre=unknown&rft.jtitle=China+Media+Project&rft.atitle=DeepSeeking+Truth&
amp;rft.date=2025-02-10&rft.aulast=Colville&rft.aufirst=Alex&rft_id=http
s%3A%2F%2Fchinamediaproject.org%2F2025%2F02%2F10%2Fdeepseeking-truth%2F&rfr_id=i
nfo%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-49">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation magazine cs1" id="CIT
EREFYang2025">Yang, Ziyi (31 January 2025). <a class="external text" href="https://w

ww.wired.com/story/deepseek-censorship/" rel="nofollow">"Here's How DeepSeek Censorship Actually Works - And How to Get Around It". <i>Wired</i>. Retrieved 12 February 2025.</cite>

<li id="cite_note-50">^ <link href="mw-data:TemplateStyles:r1238218222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id="CITEREFBoothMilmo2025">Booth, Robert; Milmo, Dan (28 January 2025). "Chinese AI chatbot DeepSeek censors itself in realtime, users report". <i>The Guardian</i>. ISSN 0261-3077. Retrieved 13 February 2025.</cite>

<li id="cite_note-51">^ <link href="mw-data:TemplateStyles:r1238218222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFNield2025">Nield, David (29 January 2025). "Want to try DeepSeek without the privacy worries? Perplexity AI just launched it on its iOS and web apps". <i>TechRadar</i>. Retrieved 13 February 2025.</cite>

<li id="cite_note-:3-52">^ <link href="mw-data:TemplateStyles:r1238218222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id="CITEREFFieldTitcomb2025">Field, Matthew; Titcomb, James (27 January 2025). "Chinese AI has sparked a $1 trillion panic – and it doesn't care about free speech". <i>The Daily Telegraph</i>. <a class="m

w-redirect" href="/wiki/ISSN_(identifier)" title="ISSN (identifier)">ISSN <a cla
ss="external text" href="https://search.worldcat.org/issn/0307-1235" rel="nofollow">
0307-1235. <a class="external text" href="https://web.archive.org/web/2025012714
2008/https://www.telegraph.co.uk/business/2025/01/27/chinese-deepseek-ai-has-sparked
-a-1-trillion-panic/" rel="nofollow">Archived from the original on 27 January 20
25. Retrieved 27 January</sp
an> 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fm
t=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=article&rft.jtitle=The+Da
ily+Telegraph&rft.atitle=Chinese+AI+has+sparked+a+%241+trillion+panic+%E2%80%93+
and+it+doesn%27t+care+about+free+speech&rft.date=2025-01-27&rft.issn=0307-12
35&rft.aulast=Field&rft.aufirst=Matthew&rft.au=Titcomb%2C+James&rft_
id=https%3A%2F%2Fwww.telegraph.co.uk%2Fbusiness%2F2025%2F01%2F27%2Fchinese-deepseek-
ai-has-sparked-a-1-trillion-panic%2F&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeep
Seek+%28chatbot%29">

<li id="cite_note-tt-53">^ <a href="#cite_ref-tt_53-
0">^{<i>a</i>} <sup><i>b</i></
sup> <link href="mw-data:TemplateStyles:r123
8218222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITE
REFSteinschaden2025">Steinschaden, Jakob (27 January 2025). <a class="external text"
href="https://www.trendingtopics.eu/deepseek-this-is-what-live-censorship-looks-like
-in-the-chinese-ai-chatbot/" rel="nofollow">"DeepSeek: This is what live censorship
looks like in the Chinese AI chatbot". <i>Trending Topics</i>. <a class="externa
l text" href="https://web.archive.org/web/20250127144208/https://www.trendingtopics.
eu/deepseek-this-is-what-live-censorship-looks-like-in-the-chinese-ai-chatbot/" rel
="nofollow">Archived from the original on 27 January 2025<span class="reference-
accessdate">. Retrieved 27 January 2025.</cite><s
pan class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%
3Amtx%3Ajournal&rft.genre=unknown&rft.jtitle=Trending+Topics&rft.atitle=
DeepSeek%3A+This+is+what+live+censorship+looks+like+in+the+Chinese+AI+chatbot&rf
t.date=2025-01-27&rft.aulast=Steinschaden&rft.aufirst=Jakob&rft_id=http
s%3A%2F%2Fwww.trendingtopics.eu%2Fdeepseek-this-is-what-live-censorship-looks-like-i
n-the-chinese-ai-chatbot%2F&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28c
hatbot%29">

<li id="cite_note-Lu_2025-54">^ <a href="#cite_ref-Lu
_2025_54-0">^{<i>a</i>} <sup><i>
b</i></sup> <link href="mw-data:Templ
ateStyles:r1238218222" rel="mw-deduplicated-inline-style"/><cite class="citation web
cs1" id="CITEREFLu2025">Lu, Donna (28 January 2025). <a class="external text" href
="https://www.theguardian.com/technology/2025/jan/28/we-tried-out-deepseek-it-works-
well-until-we-asked-it-about-tiananmen-square-and-taiwan" rel="nofollow">"We tried o
ut DeepSeek. It worked well, until we asked it about Tiananmen Square and Taiwan". <i>The Guardian</i>. <a cla
ss="mw-redirect" href="/wiki/ISSN_(identifier)" title="ISSN (identifier)">ISSN <
a class="external text" href="https://search.worldcat.org/issn/0261-3077" rel="nofol
low">0261-3077. Retrieved <span class="nowra
p">30 January 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-20
04&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&
rft.jtitle=The+Guardian&rft.atitle=We+tried+out+DeepSeek.+It+worked+well%2C+unti
l+we+asked+it+about+Tiananmen+Square+and+Taiwan&rft.date=2025-01-28&rft.issn
=0261-3077&rft.aulast=Lu&rft.aufirst=Donna&rft_id=https%3A%2F%2Fwww.theg
uardian.com%2Ftechnology%2F2025%2Fjan%2F28%2Fwe-tried-out-deepseek-it-works-well-unt
il-we-asked-it-about-tiananmen-square-and-taiwan&rfr_id=info%3Asid%2Fen.wikipedi
a.org%3ADeepSeek+%28chatbot%29">


```
<li id="cite_note-:0-55"><span class="mw-cite-backlink">^ <a href="#cite_ref-:0_55-
0"><sup><i><b>a</b></i></sup></a> <a href="#cite_ref-:0_55-1"><sup><i><b>b</b></i></
sup></a></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r123
8218222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITE
REFColville2025">Colville, Alex (10 February 2025). <a class="external text" href="h
ttps://chinamediaproject.org/2025/02/10/deepseeking-truth/" rel="nofollow">"DeepSeek
ing Truth"</a>. <i>China Media Project</i><span class="reference-accessdate">. Retri
eved <span class="nowrap">12 February</span> 2025</span>.</cite><span class="Z3988"
title="ctx_ver=Z39.88-2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&am
p;rft.genre=unknown&amp;rft.jtitle=China+Media+Project&amp;rft.atitle=DeepSeeking+Tr
uth&amp;rft.date=2025-02-10&amp;rft.aulast=Colville&amp;rft.aufirst=Alex&amp;rft_id=
https%3A%2F%2Fchinamediaproject.org%2F2025%2F02%2F10%2Fdeepseeking-truth%2F&amp;rfr_
id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></span></span>
</li>
<li id="cite_note-56"><span class="mw-cite-backlink"><b><a href="#cite_ref-56">^</a>
</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1"><a class="e
xternal text" href="https://www.theguardian.com/commentisfree/2025/jan/26/the-guardi
an-view-on-a-global-ai-race-geopolitics-innovation-and-the-rise-of-chaos" rel="nofol
low">"The Guardian view on a global AI race: geopolitics, innovation and the rise of
chaos"</a>. <i><a href="/wiki/The_Guardian" title="The Guardian">The Guardian</a></i
>. 26 January 2025. <a class="mw-redirect" href="/wiki/ISSN_(identifier)" title="ISS
N (identifier)">ISSN</a> <a class="external text" href="https://search.worldcat.org/
issn/0261-3077" rel="nofollow">0261-3077</a><span class="reference-accessdate">. Ret
rieved <span class="nowrap">27 January</span> 2025</span>.</cite><span class="Z3988"
title="ctx_ver=Z39.88-2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&am
p;rft.genre=article&amp;rft.jtitle=The+Guardian&amp;rft.atitle=The+Guardian+view+on+
a+global+AI+race%3A+geopolitics%2C+innovation+and+the+rise+of+chaos&amp;rft.date=202
5-01-26&amp;rft.issn=0261-3077&amp;rft_id=https%3A%2F%2Fwww.theguardian.com%2Fcommen
tisfree%2F2025%2Fjan%2F26%2Fthe-guardian-view-on-a-global-ai-race-geopolitics-innova
tion-and-the-rise-of-chaos&amp;rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28ch
atbot%29"></span></span>
</li>
<li id="cite_note-57"><span class="mw-cite-backlink"><b><a href="#cite_ref-57">^</a>
</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFY
angCui2025">Yang, Angela; Cui, Jasmine (27 January 2025). <a class="external text" h
ref="https://www.nbcnews.com/tech/tech-news/china-ai-assistant-deepseek-rcna189385"
rel="nofollow">"Chinese AI DeepSeek jolts Silicon Valley, giving the AI race its 'Sp
utnik moment'<span class="cs1-kern-right"></span>"</a>. <i><a href="/wiki/NBC_News"
title="NBC News">NBC News</a></i><span class="reference-accessdate">. Retrieved <spa
n class="nowrap">27 January</span> 2025</span>.</cite><span class="Z3988" title="ctx
_ver=Z39.88-2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&amp;rft.genr
e=unknown&amp;rft.jtitle=NBC+News&amp;rft.atitle=Chinese+AI+DeepSeek+jolts+Silicon+V
alley%2C+giving+the+AI+race+its+%27Sputnik+moment%27&amp;rft.date=2025-01-27&amp;rf
t.aulast=Yang&amp;rft.aufirst=Angela&amp;rft.au=Cui%2C+Jasmine&amp;rft_id=https%3A%2
F%2Fwww.nbcnews.com%2Ftech%2Ftech-news%2Fchina-ai-assistant-deepseek-rcna189385&amp;
rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></span></span>
</li>
<li id="cite_note-58"><span class="mw-cite-backlink"><b><a href="#cite_ref-58">^</a>
</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFK
imery2025">Kimery, Anthony (26 January 2025). <a class="external text" href="http
s://www.biometricupdate.com/202501/chinas-deepseek-ai-poses-formidable-cyber-data-pr
ivacy-threats" rel="nofollow">"China's DeepSeek AI poses formidable cyber, data priv
acy threats"</a>. <i>Biometric Update</i><span class="reference-accessdate">. Retrie
```

ved 27 January 2025.</cite><span class="Z3988" ti
tle="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&
rft.genre=unknown&rft.jtitle=Biometric+Update&rft.atitle=China%27s+DeepSeek+
AI+poses+formidable+cyber%2C+data+privacy+threats&rft.date=2025-01-26&rft.au
last=Kimery&rft.aufirst=Anthony&rft_id=https%3A%2F%2Fwww.biometricupdate.co
m%2F202501%2Fchinas-deepseek-ai-poses-formidable-cyber-data-privacy-threats&rfr_
id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-59">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id="CITEREF
BoothMilmo2025">Booth, Robert; Milmo, Dan (28 January 2025). <a class="external tex
t" href="https://www.theguardian.com/technology/2025/jan/28/experts-urge-caution-ove
r-use-of-chinese-ai-deepseek" rel="nofollow">"Experts urge caution over use of Chine
se AI DeepSeek". <i>The Guardi
an</i>. <a class="mw-redirect" href="/wiki/ISSN_(identifier)" title="ISSN (ident
ifier)">ISSN <a class="external text" href="https://search.worldcat.org/issn/026
1-3077" rel="nofollow">0261-3077. Retrieved <
span class="nowrap">28 January 2025.</cite><span class="Z3988" title
="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rf
t.genre=article&rft.jtitle=The+Guardian&rft.atitle=Experts+urge+caution+over
+use+of+Chinese+AI+DeepSeek&rft.date=2025-01-28&rft.issn=0261-3077&rft.a
ulast=Booth&rft.aufirst=Robert&rft.au=Milmo%2C+Dan&rft_id=https%3A%2F%2F
www.theguardian.com%2Ftechnology%2F2025%2Fjan%2F28%2Fexperts-urge-caution-over-use-o
f-chinese-ai-deepseek&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbo
t%29">

<li id="cite_note-60">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFH
ornby2025">Hornby, Rael (28 January 2025). <a class="external text" href="https://ww
w.laptopmag.com/ai/deepseeks-success-has-painted-a-huge-tiktok-shaped-target-on-its-
back" rel="nofollow">"DeepSeek's success has painted a huge TikTok-shaped target on
its back". <i>La
ptopMag</i>. <a class="external text" href="https://web.archive.org/web/20250128
142525/https://www.laptopmag.com/ai/deepseeks-success-has-painted-a-huge-tiktok-shap
ed-target-on-its-back" rel="nofollow">Archived from the original on 28 January 2
025. Retrieved 28 January</s
pan> 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_f
mt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&rft.jtitle=Lapto
pMag&rft.atitle=DeepSeek%27s+success+has+painted+a+huge+TikTok-shaped+target+on+
its+back&rft.date=2025-01-28&rft.aulast=Hornby&rft.aufirst=Rael&rft_
id=https%3A%2F%2Fwww.laptopmag.com%2Fai%2Fdeepseeks-success-has-painted-a-huge-tikto
k-shaped-target-on-its-back&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28c
hatbot%29">

<li id="cite_note-61">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation magazine cs1" id="CIT
EREFBurgessNewman2025">Burgess, Matt; Newman, Lily Hay (27 January 2025). <a class
="external text" href="https://www.wired.com/story/deepseek-ai-china-privacy-data/"
rel="nofollow">"DeepSeek's Popular AI App Is Explicitly Sending US Data to China". <i>Wired</i>. <a cl
ass="mw-redirect" href="/wiki/ISSN_(identifier)" title="ISSN (identifier)">ISSN <a class="external text" href="https://search.worldcat.org/issn/1059-1028" rel="no
follow">1059-1028. <a class="external text" href="https://web.archive.org/web/20

250127232432/https://www.wired.com/story/deepseek-ai-china-privacy-data/" rel="nofol
low">Archived from the original on 27 January 2025<span class="reference-accessd
ate">. Retrieved 28 January 2025.</cite><span cla
ss="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3
Ajournal&rft.genre=article&rft.jtitle=Wired&rft.atitle=DeepSeek%27s+Popu
lar+AI+App+Is+Explicitly+Sending+US+Data+to+China&rft.date=2025-01-27&rft.is
sn=1059-1028&rft.aulast=Burgess&rft.aufirst=Matt&rft.au=Newman%2C+Lily+H
ay&rft_id=https%3A%2F%2Fwww.wired.com%2Fstory%2Fdeepseek-ai-china-privacy-data%2
F&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-62">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id="CITEREF
Kim2025">Kim, Hyun-soo (18 February 2025). <a class="external text" href="https://we
b.archive.org/web/20250218135802/https://en.yna.co.kr/view/AEN20250218005300315" rel
="nofollow">"DeepSeek sent S. Korean user data to China's ByteDance: regulator".
<i>Yonhap News</
a></i>. Archived from <a class="external text" href="https://en.yna.co.kr/view/AEN20
250218005300315" rel="nofollow">the original on 18 February 2025<span class="ref
erence-accessdate">. Retrieved 19 February 2025.
</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ff
mt%3Akev%3Amtx%3Ajournal&rft.genre=article&rft.jtitle=Yonhap+News&rft.at
itle=DeepSeek+sent+S.+Korean+user+data+to+China%27s+ByteDance%3A+regulator&rft.d
ate=2025-02-18&rft.aulast=Kim&rft.aufirst=Hyun-soo&rft_id=https%3A%2F%2F
en.yna.co.kr%2Fview%2FAEN20250218005300315&rfr_id=info%3Asid%2Fen.wikipedia.org%
3ADeepSeek+%28chatbot%29">

<li id="cite_note-63">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1"><a class="e
xternal text" href="https://www.reuters.com/technology/south-koreas-data-protection-
authority-suspends-local-service-deepseek-2025-02-17/" rel="nofollow">"New downloads
of DeepSeek suspended in South Korea, data protection agency says". <i><a href
="/wiki/Reuters" title="Reuters">Reuters</i>. 17 February 2025<span class="refer
ence-accessdate">. Retrieved 19 February 2025.</c
ite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%
3Akev%3Amtx%3Ajournal&rft.genre=article&rft.jtitle=Reuters&rft.atitle=Ne
w+downloads+of+DeepSeek+suspended+in+South+Korea%2C+data+protection+agency+says&
rft.date=2025-02-17&rft_id=https%3A%2F%2Fwww.reuters.com%2Ftechnology%2Fsouth-ko
reas-data-protection-authority-suspends-local-service-deepseek-2025-02-17%2F&rfr
_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-64">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFD
aniel">Daniel, Lars. <a class="external text" href="https://www.forbes.com/sites/lar
sdaniel/2025/02/01/deepseek-data-leak-exposes--1000000-sensitive-records/" rel="nofo
llow">"DeepSeek Data Leak Exposes 1,000,000 Sensitive Records". <i>Forbes</i><sp
an class="reference-accessdate">. Retrieved 6 April 2025
.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3
Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&rft.jtitle=Forbes&rf
t.atitle=DeepSeek+Data+Leak+Exposes+1%2C000%2C000+Sensitive+Records&rft.aulast=D
aniel&rft.aufirst=Lars&rft_id=https%3A%2F%2Fwww.forbes.com%2Fsites%2Flarsdan
iel%2F2025%2F02%2F01%2Fdeepseek-data-leak-exposes--1000000-sensitive-records%2F&
rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">


```
<li id="cite_note-65"><span class="mw-cite-backlink"><b><a href="#cite_ref-65">^</a>
</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1"><a class="ex
ternal text" href="https://www.wiz.io/blog/wiz-research-uncovers-exposed-deepseek-da
tabase-leak" rel="nofollow">"Wiz Research Uncovers Exposed DeepSeek Database Leaking
Sensitive Information, Including Chat History | Wiz Blog"</a>. <i>wiz.io</i>. 29 Jan
uary 2025<span class="reference-accessdate">. Retrieved <span class="nowrap">6 April
</span> 2025</span>.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&amp;rft_va
l_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&amp;rft.genre=unknown&amp;rft.jtitle=wi
z.io&amp;rft.atitle=Wiz+Research+Uncovers+Exposed+DeepSeek+Database+Leaking+Sensitiv
e+Information%2C+Including+Chat+History+%7C+Wiz+Blog&amp;rft.date=2025-01-29&amp;rft
_id=https%3A%2F%2Fwww.wiz.io%2Fblog%2Fwiz-research-uncovers-exposed-deepseek-databas
e-leak&amp;rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></span></s
pan>
</li>
<li id="cite_note-66"><span class="mw-cite-backlink"><b><a href="#cite_ref-66">^</a>
</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFK
ang2025">Kang, Taejun (24 April 2025). <a class="external text" href="https://www.rf
a.org/english/china/2025/04/24/china-deep-seek-south-korea-user-data/" rel="nofollo
w">"China's DeepSeek transferred South Korean user info overseas: Seoul regulator"</
a>. <i><a href="/wiki/Radio_Free_Asia" title="Radio Free Asia">Radio Free Asia</a></
i><span class="reference-accessdate">. Retrieved <span class="nowrap">24 April</span
> 2025</span>.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&amp;rft_val_fmt=
info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&amp;rft.genre=unknown&amp;rft.jtitle=Radio+Fr
ee+Asia&amp;rft.atitle=China%27s+DeepSeek+transferred+South+Korean+user+info+oversea
s%3A+Seoul+regulator&amp;rft.date=2025-04-24&amp;rft.aulast=Kang&amp;rft.aufirst=Tae
jun&amp;rft_id=https%3A%2F%2Fwww.rfa.org%2Fenglish%2Fchina%2F2025%2F04%2F24%2Fchina-
deep-seek-south-korea-user-data%2F&amp;rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSe
ek+%28chatbot%29"></span></span>
</li>
<li id="cite_note-67"><span class="mw-cite-backlink"><b><a href="#cite_ref-67">^</a>
</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFS
chechner2025">Schechner, Sam (8 February 2025). <span class="id-lock-subscription" t
itle="Paid subscription required"><a class="external text" href="https://www.wsj.co
m/tech/ai/china-deepseek-ai-dangerous-information-e8eb31a8" rel="nofollow">"DeepSeek
Offers Bioweapon, Self-Harm Information"</a></span>. <i><a href="/wiki/The_Wall_Stre
et_Journal" title="The Wall Street Journal">The Wall Street Journal</a></i>. <a clas
s="external text" href="https://archive.today/20250209235331/https://www.wsj.com/tec
h/ai/china-deepseek-ai-dangerous-information-e8eb31a8" rel="nofollow">Archived</a> f
rom the original on 9 February 2025<span class="reference-accessdate">. Retrieved <s
pan class="nowrap">12 February</span> 2025</span>.</cite><span class="Z3988" title
="ctx_ver=Z39.88-2004&amp;rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&amp;rf
t.genre=unknown&amp;rft.jtitle=The+Wall+Street+Journal&amp;rft.atitle=DeepSeek+Offer
s+Bioweapon%2C+Self-Harm+Information&amp;rft.date=2025-02-08&amp;rft.aulast=Schechne
r&amp;rft.aufirst=Sam&amp;rft_id=https%3A%2F%2Fwww.wsj.com%2Ftech%2Fai%2Fchina-deeps
eek-ai-dangerous-information-e8eb31a8&amp;rfr_id=info%3Asid%2Fen.wikipedia.org%3ADee
pSeek+%28chatbot%29"></span></span>
</li>
<li id="cite_note-68"><span class="mw-cite-backlink"><b><a href="#cite_ref-68">^</a>
</b></span> <span class="reference-text"><link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFG
oodin2025">Goodin, Dan (6 February 2025). <a class="external text" href="https://ars
technica.com/security/2025/02/deepseek-ios-app-sends-data-unencrypted-to-bytedance-c
ontrolled-servers/" rel="nofollow">"DeepSeek iOS app sends data unencrypted to ByteD
```

ance-controlled servers". <i>A
rs Technica</i>. Retrieved <span class="nowra
p">9 February 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-20
04&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&
rft.jtitle=Ars+Technica&rft.atitle=DeepSeek+iOS+app+sends+data+unencrypted+to+By
teDance-controlled+servers&rft.date=2025-02-06&rft.aulast=Goodin&rft.auf
irst=Dan&rft_id=https%3A%2F%2Farstechnica.com%2Fsecurity%2F2025%2F02%2Fdeepseek-
ios-app-sends-data-unencrypted-to-bytedance-controlled-servers%2F&rfr_id=info%3A
sid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-69">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1"><a class="ex
ternal text" href="https://krebsonsecurity.com/2025/02/experts-flag-security-privacy
-risks-in-deepseek-ai-app/" rel="nofollow">"Experts Flag Security, Privacy Risks in
DeepSeek AI App". <i><a class="mw-redirect" href="/wiki/Krebs_on_Security" title
="Krebs on Security">Krebs on Security</i>. 6 February 2025<span class="referenc
e-accessdate">. Retrieved 9 February 2025.</cite>
<span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Ake
v%3Amtx%3Ajournal&rft.genre=unknown&rft.jtitle=Krebs+on+Security&rft.ati
tle=Experts+Flag+Security%2C+Privacy+Risks+in+DeepSeek+AI+App&rft.date=2025-02-0
6&rft_id=https%3A%2F%2Fkrebsonsecurity.com%2F2025%2F02%2Fexperts-flag-security-p
rivacy-risks-in-deepseek-ai-app%2F&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSe
ek+%28chatbot%29">

<li id="cite_note-70">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1"><a class="ex
ternal text" href="https://www.reuters.com/technology/artificial-intelligence/alibab
a-chinese-state-funds-interested-investing-deepseek-information-reports-2025-02-19/"
rel="nofollow">"DeepSeek's outside funding draws interest from Alibaba, Chinese stat
e funds, The Information reports". <i>Re
uters</i>. 20 February 2025. Retrieved 25 February 2025.</cite><span class="Z3988" title="ctx_
ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre
=unknown&rft.jtitle=Reuters&rft.atitle=DeepSeek%27s+outside+funding+draws+in
terest+from+Alibaba%2C+Chinese+state+funds%2C+The+Information+reports&rft.date=2
025-02-20&rft_id=https%3A%2F%2Fwww.reuters.com%2Ftechnology%2Fartificial-intelli
gence%2Falibaba-chinese-state-funds-interested-investing-deepseek-information-report
s-2025-02-19%2F&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-71">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1"><a class="ex
ternal text" href="https://www.tradingkey.com/news/more-news/250387930-reuters" rel
="nofollow">"DeepSeek Weighs Raising Outside Money For First Time". <i>TradingKe
y</i>. 19 February 2025. Retrieved <span class="n
owrap">25 February 2025.</cite><span class="Z3988" title="ctx_ver=Z39.
88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown
&rft.jtitle=TradingKey&rft.atitle=DeepSeek+Weighs+Raising+Outside+Money+For+
First+Time&rft.date=2025-02-19&rft_id=https%3A%2F%2Fwww.tradingkey.com%2Fnew
s%2Fmore-news%2F250387930-reuters&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSee
k+%28chatbot%29">

<li id="cite_note-72">^

 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1"><a class="ex
ternal text" href="https://x.com/deepseek_ai/status/1892786555494019098" rel="nofoll
ow">"Day 0: Warming up for #OpenSourceWeek!". <a href="/wiki/Twitter" title="Twi
tter">X. 21 February 2025. Retrieved <span cl
ass="nowrap">25 February 2025.</cite><span class="Z3988" title="ctx_ve
r=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Abook&rft.genre=unkn
own&rft.btitle=Day+0%3A+Warming+up+for+%23OpenSourceWeek%21&rft.pub=X&rf
t.date=2025-02-21&rft_id=https%3A%2F%2Fx.com%2Fdeepseek_ai%2Fstatus%2F1892786555
494019098&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

<li id="cite_note-73">^
 <link href="mw-data:TemplateStyles:r1238218
222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFR
ai2025">Rai, Saritha (21 February 2025). <a class="external text" href="https://www.
bloomberg.com/news/articles/2025-02-21/deepseek-promises-to-share-even-more-ai-code-
in-a-rare-step" rel="nofollow">"DeepSeek Promises to Share Even More AI Code in a Ra
re Step". <i><a class="mw-redirect" href="/wiki/Bloomberg_LP" title="Bloomberg L
P">Bloomberg LP</i>. Retrieved <span class="n
owrap">25 February 2025.</cite><span class="Z3988" title="ctx_ver=Z39.
88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown
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kipedia.org%3ADeepSeek+%28chatbot%29">

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222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1"><a class="e
xternal text" href="https://www.reuters.com/technology/artificial-intelligence/italy
-regulator-seeks-info-deepseek-data-protection-2025-01-28/" rel="nofollow">"Italy re
gulator seeks information from DeepSeek on data protection". <i><a href="/wiki/R
euters" title="Reuters">Reuters</i>. 28 January 2025<span class="reference-acces
sdate">. Retrieved 28 January 2025.</cite><span c
lass="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amt
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tor+seeks+information+from+DeepSeek+on+data+protection&rft.date=2025-01-28&r
ft_id=https%3A%2F%2Fwww.reuters.com%2Ftechnology%2Fartificial-intelligence%2Fitaly-r
egulator-seeks-info-deepseek-data-protection-2025-01-28%2F&rfr_id=info%3Asid%2Fe
n.wikipedia.org%3ADeepSeek+%28chatbot%29">

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222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id="CITEREF
ShalalShepardson2025">Shalal, Andrea; Shepardson, David (28 January 2025). <a class
="external text" href="https://www.reuters.com/technology/artificial-intelligence/wh
ite-house-evaluates-china-ai-app-deepseeks-affect-national-security-official-2025-01
-28/" rel="nofollow">"White House evaluates effect of China AI app DeepSeek on natio
nal security, official says". <i>Reuters
</i>. Retrieved 28 Janua
ry 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_
val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=article&rft.jtitle=
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s.com%2Ftechnology%2Fartificial-intelligence%2Fwhite-house-evaluates-china-ai-app-de
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ikipedia.org%3ADeepSeek+%28chatbot%29">

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222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFF
ield2025">Field, Hayden (28 January 2025). <a class="external text" href="https://ww
w.cnbc.com/2025/01/28/us-navy-restricts-use-of-deepseek-ai-imperative-to-avoid-usin
g.html" rel="nofollow">"U.S. Navy bans use of DeepSeek due to 'security and ethical
concerns'". <i><a href="/wiki/CNBC" title="C
NBC">CNBC</i>. Retrieved <span class="nowra
p">6 February 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-20
04&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&
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yden&rft_id=https%3A%2F%2Fwww.cnbc.com%2F2025%2F01%2F28%2Fus-navy-restricts-use-
of-deepseek-ai-imperative-to-avoid-using.html&rfr_id=info%3Asid%2Fen.wikipedia.o
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222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1"><a class="e
xternal text" href="https://www.reuters.com/technology/artificial-intelligence/italy
s-privacy-watchdog-blocks-chinese-ai-app-deepseek-2025-01-30/" rel="nofollow">"Ital
y's regulator blocks Chinese AI app DeepSeek on data protection". <i><a href="/w
iki/Reuters" title="Reuters">Reuters</i>. 31 January 2025<span class="reference-
accessdate">. Retrieved 31 January 2025.</cite><s
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italys-privacy-watchdog-blocks-chinese-ai-app-deepseek-2025-01-30%2F&rfr_id=inf
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s="citation news cs1"><a class="external text" href="https://www.reuters.com/technol
ogy/artificial-intelligence/taiwan-says-government-departments-should-not-use-deepse
ek-citing-security-2025-01-31/" rel="nofollow">"Taiwan says government departments s
hould not use DeepSeek, citing security concerns". <i><a href="/wiki/Reuters" ti
tle="Reuters">Reuters</i>. 31 January 2025. R
etrieved 31 January 2025.</cite><span class="Z398
8" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal
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2Ftaiwan-says-government-departments-should-not-use-deepseek-citing-security-2025-01
-31%2F&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></s
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222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1"><a class="e
xternal text" href="https://www.reuters.com/technology/artificial-intelligence/dutch
-privacy-watchdog-launch-investigation-into-chinas-deepseek-ai-2025-01-31/" rel="nof
ollow">"Dutch privacy watchdog to launch investigation into China's DeepSeek AI". <i>Reuters</i>. 31 January 2025. Retrieved 1 February 2025
.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3
Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=article&rft.jtitle=Reuters&rf
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mp;rft.date=2025-01-31&rft_id=https%3A%2F%2Fwww.reuters.com%2Ftechnology%2Fartif
icial-intelligence%2Fdutch-privacy-watchdog-launch-investigation-into-chinas-deepsee
k-ai-2025-01-31%2F&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%2
9">

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222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFL
athan2025">Lathan, Nadia (31 January 2025). <a class="external text" href="https://a
pnews.com/article/texas-deepseek-apps-ban-3828a4743e9919398dfac0ba9d4a5c25" rel="nof
ollow">"Texas governor orders ban on DeepSeek, RedNote for government devices".
<i>Associated Press</i
>. Retrieved 1 February</spa
n> 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt
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9">

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222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFW
illiams2025">Williams, Tom (4 February 2025). <a class="external text" href="http
s://ia.acs.org.au/article/2025/nsw-govt-blocks-access-to-deepseek-ai.html" rel="nofo
llow">"NSW Govt blocks access to DeepSeek AI". <i><a href="/wiki/Information_Ag
e" title="Information Age">Information Age</i>. <a class="external text" href="h
ttps://web.archive.org/web/20250204130742/https://ia.acs.org.au/article/2025/nsw-gov
t-blocks-access-to-deepseek-ai.html" rel="nofollow">Archived from the original o
n 4 February 2025. Retrieved <span class="nowra
p">4 February 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-20
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p;rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29">

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222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFG
erken2025">Gerken, Tom (4 February 2025). <a class="external text" href="https://ww
w.bbc.com/news/articles/c8d95v0nr1yo" rel="nofollow">"Australia bans DeepSeek on gov
ernment devices over security risk". <i>BBC
</i>. Retrieved 4 February</
span> 2025.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_
fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=unknown&rft.jtitle=BBC&

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F%2Fwww.bbc.com%2Fnews%2Farticles%2Fc8d95v0nr1yo&rfr_id=info%3Asid%2Fen.wikipedi
a.org%3ADeepSeek+%28chatbot%29">

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222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1" id="CITEREFL
im2025">Lim, Lionel (6 February 2025). <a class="external text" href="https://fortun
e.com/asia/2025/02/06/south-korea-blocks-deepseek-government-devices-china-ai-taiwan
-australia/" rel="nofollow">"South Korea's government is the latest to block China's
DeepSeek on official devices, following Australia and Taiwan". <i><a href="/wik
i/Fortune_(magazine)" title="Fortune (magazine)">Fortune</i><span class="referen
ce-accessdate">. Retrieved 6 February 2025.</cite
><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Ak
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+Korea%27s+government+is+the+latest+to+block+China%27s+DeepSeek+on+official+devices%
2C+following+Australia+and+Taiwan&rft.date=2025-02-06&rft.aulast=Lim&rf
t.aufirst=Lionel&rft_id=https%3A%2F%2Ffortune.com%2Fasia%2F2025%2F02%2F06%2Fsout
h-korea-blocks-deepseek-government-devices-china-ai-taiwan-australia%2F&rfr_id=i
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222" rel="mw-deduplicated-inline-style"/><cite class="citation news cs1" id="CITEREF
Christopher2025">Christopher, Nardi (6 February 2025). <a class="external text" href
="https://nationalpost.com/news/canada/federal-government-bans-chinese-ai-startup-de
epseek-on-public-service-devices" rel="nofollow">"Federal government bans Chinese AI
startup DeepSeek on public service devices". <i><a href="/wiki/National_Post" ti
tle="National Post">National Post</i>. Retrie
ved 7 February 2025.</cite><span class="Z3988" ti
tle="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&
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s+Chinese+AI+startup+DeepSeek+on+public+service+devices&rft.date=2025-02-06&
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om%2Fnews%2Fcanada%2Ffederal-government-bans-chinese-ai-startup-deepseek-on-public-s
ervice-devices&rfr_id=info%3Asid%2Fen.wikipedia.org%3ADeepSeek+%28chatbot%29"></
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222" rel="mw-deduplicated-inline-style"/><cite class="citation web cs1 cs1-prop-fore
ign-lang-source" id="CITEREFLee2025">Lee, Sang-Seo (17 February 2025). <a class="ext
ernal text" href="https://m.yna.co.kr/view/AKR20250217066600530" rel="nofollow">"Per
sonal Information Protection Commission suspends new services of Deepseek due to ins
ufficient personal information policy". <i><a class="mw-redirect" href="/wiki/Yo
nhap" title="Yonhap">Yonhap</i> (in Korean).
Retrieved 17 February 2025.</cite><span class="Z3
988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajourn
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xternal text" href="http://web.archive.org/web/20250323140252/https://www.reuters.co
m/technology/artificial-intelligence/us-commerce-department-bureaus-ban-chinas-deeps
eek-government-devices-sources-2025-03-17/" rel="nofollow">"US Commerce department b
ureaus ban China's DeepSeek on government devices, sources say". <i>Reuters</i>.
Archived from <a class="external text" href="https://www.reuters.com/technology/arti
ficial-intelligence/us-commerce-department-bureaus-ban-chinas-deepseek-government-de
vices-sources-2025-03-17/" rel="nofollow">the original on 23 March 2025<span cla
ss="reference-accessdate">. Retrieved 10 April 2025</spa
n>.</cite><span class="Z3988" title="ctx_ver=Z39.88-2004&rft_val_fmt=info%3Aofi%
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dient</a></li></ul></li>
<li><a href="/wiki/Diffusion_process" title="Diffusion process">Diffusion</a></li>
<li><a href="/wiki/Latent_diffusion_model" title="Latent diffusion model">Latent dif
fusion model</a></li>
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g">Adversary</a></li>
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tion">RAG</a></li>
<li><a href="/wiki/Uncanny_valley" title="Uncanny valley">Uncanny valley</a></li>
<li><a href="/wiki/Reinforcement_learning_from_human_feedback" title="Reinforcement
learning from human feedback">RLHF</a></li>
<li><a href="/wiki/Self-supervised_learning" title="Self-supervised learning">Self-s
upervised learning</a></li>
<li><a href="/wiki/Recursive_self-improvement" title="Recursive self-improvement">Re
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<li><a href="/wiki/Word_embedding" title="Word embedding">Word embedding</a></li>
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tificial intelligence)">Hallucination</a></li></ul>
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learning)">Artificial neural network</a>
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ul></li>
<li><a href="/wiki/Language_model" title="Language model">Language model</a>
<ul><li><a href="/wiki/Large_language_model" title="Large language model">Large lang
uage model</a></li>
<li><a href="/wiki/Neural_machine_translation" title="Neural machine translation">NM
T</a></li></ul></li>
<li><a href="/wiki/Artificial_general_intelligence" title="Artificial general intell
igence">Artificial general intelligence (AGI)</a></li></ul>
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synthesis</a></li>
<li><a href="/wiki/Handwriting_recognition" title="Handwriting recognition">HWR</a>
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<li><a href="/wiki/Optical_character_recognition" title="Optical character recogniti
on">OCR</a></li>
<li><a href="/wiki/Deep_learning_speech_synthesis" title="Deep learning speech synth
esis">Speech synthesis</a>
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</a>
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ux</a></li>
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<li><a href="/wiki/MiniMax_(company)#Hailuo_AI" title="MiniMax (company)">Hailuo AI
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ra</a></li>
<li><a href="/wiki/Google_DeepMind#Video_generation" title="Google DeepMind">Veo</a>
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<li><a href="/wiki/Music_and_artificial_intelligence" title="Music and artificial in
telligence">Music generation</a>
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<li><a href="/wiki/Llama_(language_model)" title="Llama (language model)">Llama</a>
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<li><a href="/wiki/Chinchilla_(language_model)" title="Chinchilla (language model)">
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<li><a href="/wiki/GPT-2" title="GPT-2">2</a></li>
<li><a href="/wiki/GPT-3" title="GPT-3">3</a></li>
<li><a href="/wiki/GPT-J" title="GPT-J">J</a></li>
<li><a href="/wiki/ChatGPT" title="ChatGPT">ChatGPT</a></li>
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<li><a href="/wiki/OpenAI_o3" title="OpenAI o3">o3</a></li>
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<ul><li><a href="/wiki/Gemini_(chatbot)" title="Gemini (chatbot)">chatbot</a></li></
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<li><a href="/wiki/Grok_(chatbot)" title="Grok (chatbot)">Grok</a></li>
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<li><a href="/wiki/IBM_Watsonx" title="IBM Watsonx">IBM Watsonx</a></li>
<li><a href="/wiki/IBM_Granite" title="IBM Granite">Granite</a></li>
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<li><a href="/wiki/Self-driving_car" title="Self-driving car">Self-driving car</a></
li>
<li><a href="/wiki/MuZero" title="MuZero">MuZero</a></li>
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<li><a href="/wiki/Walter_Pitts" title="Walter Pitts">Walter Pitts</a></li>
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<li><a href="/wiki/Claude_Shannon" title="Claude Shannon">Claude Shannon</a></li>
<li><a href="/wiki/Marvin_Minsky" title="Marvin Minsky">Marvin Minsky</a></li>
<li><a href="/wiki/John_McCarthy_(computer_scientist)" title="John McCarthy (compute
r scientist)">John McCarthy</a></li>
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ter (computer scientist)">Nathaniel Rochester</a></li>
<li><a href="/wiki/Allen_Newell" title="Allen Newell">Allen Newell</a></li>
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<li><a href="/wiki/Oliver_Selfridge" title="Oliver Selfridge">Oliver Selfridge</a></
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Frank Rosenblatt
Bernard Widrow
Joseph Weizenbaum
Seymour Papert
Seppo Linnainmaa
Paul Werbos
Jürgen Schmidhuber
Yann LeCun
Geoffrey Hinton
John Hopfield
Yoshua Bengio
Lotfi A. Zadeh
Stephen Grossberg
Alex Graves
Andrew Ng
Fei-Fei Li
Alex Krizhevsky
Ilya Sutskever
Demis Hassabis
David Silver
Ian Goodfellow
Andrej Karpathy
James Goodnight

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Neural Turing machine
Differentiable neural computer
Transformer
Vision transformer (ViT)
Recurrent neural network (RNN)
Long short-term memory (LSTM)
Gated recurrent unit (GRU)
Echo state network
Multilayer perceptron (MLP)
Convolutional neural network (CNN)
Residual

neural network (RNN)
Highway network
<a href="/wiki/Mamba_(deep_learning_architecture)" title="Mamba (deep learning a
rchitecture)">Mamba
Autoencoder
Variatio
nal autoencoder (VAE)
<a href="/wiki/Generative_adversarial_network" title="Generative adversarial net
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Graph neural n
etwork (GNN)
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Technology</
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Mach
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<a href="/wiki/List_of_artificial_intelligence_projects" title="List of artifici
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NewPP limit report
Parsed by mw-web.codfw.main-54cd9bd44d-5wbm2
Cached time: 20250504110040
Cache expiry: 2592000
Reduced expiry: false
Complications: [vary-revision-sha1, show-toc]
CPU time usage: 0.895 seconds
Real time usage: 1.055 seconds
Preprocessor visited node count: 6358/1000000
Post-expand include size: 250966/2097152 bytes
Template argument size: 5296/2097152 bytes
Highest expansion depth: 27/100

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Expensive parser function count: 10/500
Unstrip recursion depth: 1/20
Unstrip post-expand size: 338411/5000000 bytes
Lua time usage: 0.569/10.000 seconds
Lua memory usage: 7606249/52428800 bytes
Number of Wikibase entities loaded: 1/500
-->
<!--
Transclusion expansion time report (%,ms,calls,template)
100.00%   900.460      1 -total
 58.78%   529.295      2 Template:Reflist
 27.47%   247.391     50 Template:Cite_web
 20.39%   183.560     28 Template:Cite_news
 13.40%   120.682      2 Template:Infobox
 11.39%   102.554      1 Template:Infobox_software
  9.72%    87.554      5 Template:Navbox
  8.42%    75.812      1 Template:AI-based_chatbots
  7.39%    66.551      1 Template:Short_description
  4.90%    44.114      2 Template:Pagetype
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mers" title="Category:Generative pre-trained transformers">Generative pre-trained tr
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additional terms may apply. By using this site, you agree to the <a class="extiw" hr
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<li id="footer-places-disclaimers"><a href="/wiki/Wikipedia:General_disclaimer">Disc
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<li id="footer-places-wm-codeofconduct"><a href="https://foundation.wikimedia.org/wi
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</div>
<input name="title" type="hidden" value="Special:Search"/>
</div>
<button class="cdx-button cdx-search-input__end-button">Search</button>
</form>
</div>
</div>
</div>
<div class="vector-sticky-header-context-bar">
<nav aria-label="Contents" class="vector-toc-landmark">
<div class="vector-dropdown mw-portlet mw-portlet-sticky-header-toc vector-sticky-he
ader-toc vector-button-flush-left" id="vector-sticky-header-toc">
<input aria-haspopup="true" aria-label="Toggle the table of contents" class="vector-
dropdown-checkbox" data-event-name="ui.dropdown-vector-sticky-header-toc" id="vector
-sticky-header-toc-checkbox" role="button" type="checkbox"/>
<label aria-hidden="true" class="vector-dropdown-label cdx-button cdx-button--fake-b
utton cdx-button--fake-button--enabled cdx-button--weight-quiet cdx-button--icon-onl
y" for="vector-sticky-header-toc-checkbox" id="vector-sticky-header-toc-label"><span
class="vector-icon mw-ui-icon-listBullet mw-ui-icon-wikimedia-listBullet"></span>
<span class="vector-dropdown-label-text">Toggle the table of contents</span>
</label>
<div class="vector-dropdown-content">
<div class="vector-unpinned-container" id="vector-sticky-header-toc-unpinned-contain
er">
</div>
</div>
</div>
</nav>
<div aria-hidden="true" class="vector-sticky-header-context-bar-primary"><span class
="mw-page-title-main">DeepSeek (chatbot)</span></div>
</div>
```

```
</div>
<div aria-hidden="true" class="vector-sticky-header-end">
<div class="vector-sticky-header-icons">
<a class="cdx-button cdx-button--fake-button cdx-button--fake-button--enabled cdx-bu
tton--weight-quiet cdx-button--icon-only" data-event-name="talk-sticky-header" href
="#" id="ca-talk-sticky-header" tabindex="-1"><span class="vector-icon mw-ui-icon-sp
eechBubbles mw-ui-icon-wikimedia-speechBubbles"></span>
<span></span>
</a>
<a class="cdx-button cdx-button--fake-button cdx-button--fake-button--enabled cdx-bu
tton--weight-quiet cdx-button--icon-only" data-event-name="subject-sticky-header" hr
ef="#" id="ca-subject-sticky-header" tabindex="-1"><span class="vector-icon mw-ui-ic
on-article mw-ui-icon-wikimedia-article"></span>
<span></span>
</a>
<a class="cdx-button cdx-button--fake-button cdx-button--fake-button--enabled cdx-bu
tton--weight-quiet cdx-button--icon-only" data-event-name="history-sticky-header" hr
ef="#" id="ca-history-sticky-header" tabindex="-1"><span class="vector-icon mw-ui-ic
on-wikimedia-history mw-ui-icon-wikimedia-wikimedia-history"></span>
<span></span>
</a>
<a class="cdx-button cdx-button--fake-button cdx-button--fake-button--enabled cdx-bu
tton--weight-quiet cdx-button--icon-only mw-watchlink" data-event-name="watch-sticky
-header" href="#" id="ca-watchstar-sticky-header" tabindex="-1"><span class="vector-
icon mw-ui-icon-wikimedia-star mw-ui-icon-wikimedia-wikimedia-star"></span>
<span></span>
</a>
<a class="cdx-button cdx-button--fake-button cdx-button--fake-button--enabled cdx-bu
tton--weight-quiet cdx-button--icon-only" data-event-name="wikitext-edit-sticky-head
er" href="#" id="ca-edit-sticky-header" tabindex="-1"><span class="vector-icon mw-ui
-icon-wikimedia-wikiText mw-ui-icon-wikimedia-wikimedia-wikiText"></span>
<span></span>
</a>
<a class="cdx-button cdx-button--fake-button cdx-button--fake-button--enabled cdx-bu
tton--weight-quiet cdx-button--icon-only" data-event-name="ve-edit-sticky-header" hr
ef="#" id="ca-ve-edit-sticky-header" tabindex="-1"><span class="vector-icon mw-ui-ic
on-wikimedia-edit mw-ui-icon-wikimedia-wikimedia-edit"></span>
<span></span>
</a>
<a class="cdx-button cdx-button--fake-button cdx-button--fake-button--enabled cdx-bu
tton--weight-quiet cdx-button--icon-only" data-event-name="ve-edit-protected-sticky-
header" href="#" id="ca-viewsource-sticky-header" tabindex="-1"><span class="vector-
icon mw-ui-icon-wikimedia-editLock mw-ui-icon-wikimedia-wikimedia-editLock"></span>
<span></span>
</a>
</div>
<div class="vector-sticky-header-buttons">
<button class="cdx-button cdx-button--weight-quiet mw-interlanguage-selector" data-e
vent-name="ui.dropdown-p-lang-btn-sticky-header" id="p-lang-btn-sticky-header" tabin
dex="-1"><span class="vector-icon mw-ui-icon-wikimedia-language mw-ui-icon-wikimedia
-wikimedia-language"></span>
<span>1 language</span>
</button>
<a class="cdx-button cdx-button--fake-button cdx-button--fake-button--enabled cdx-bu
tton--weight-quiet cdx-button--action-progressive" data-event-name="addsection-stick
y-header" href="#" id="ca-addsection-sticky-header" tabindex="-1"><span class="vecto
```

```
r-icon mw-ui-icon-speechBubbleAdd-progressive mw-ui-icon-wikimedia-speechBubbleAdd-p
rogressive"></span>
<span>Add topic</span>
</a>
</div>
<div class="vector-sticky-header-icon-end">
<div class="vector-user-links">
</div>
</div>
</div>
</div>
</div>
<div class="mw-portlet mw-portlet-dock-bottom emptyPortlet" id="p-dock-bottom">
<ul>
</ul>
</div>
<script>(RLQ=window.RLQ||[]).push(function(){mw.config.set({"wgHostname":"mw-web.cod
fw.main-54cd9bd44d-vq64b","wgBackendResponseTime":163,"wgPageParseReport":{"limitrep
ort":{"cputime":"0.895","walltime":"1.055","ppvisitednodes":{"value":6358,"limit":10
00000},"postexpandincludesize":{"value":250966,"limit":2097152},"templateargumentsiz
e":{"value":5296,"limit":2097152},"expansiondepth":{"value":27,"limit":100},"expensi
vefunctioncount":{"value":10,"limit":500},"unstrip-depth":{"value":1,"limit":20},"un
strip-size":{"value":338411,"limit":5000000},"entityaccesscount":{"value":1,"limit":
500},"timingprofile":["100.00%   900.460      1 -total"," 58.78%   529.295      2 Temp
late:Reflist"," 27.47%  247.391     50 Template:Cite_web"," 20.39%  183.560     28 T
emplate:Cite_news"," 13.40%  120.682      2 Template:Infobox"," 11.39%  102.554
1 Template:Infobox_software"," 9.72%   87.554      5 Template:Navbox"," 8.42%    7
5.812      1 Template:AI-based_chatbots"," 7.39%   66.551      1 Template:Short_des
cription"," 4.90%   44.114      2 Template:Pagetype"]},"scribunto":{"limitreport-ti
meusage":{"value":"0.569","limit":"10.000"},"limitreport-memusage":{"value":760624
9,"limit":52428800}},"cachereport":{"origin":"mw-web.codfw.main-54cd9bd44d-5wbm2","t
imestamp":"20250504110040","ttl":2592000,"transientcontent":false}}});});</script>
<script type="application/ld+json">{"@context":"https:\/\/schema.org","@type":"Artic
le","name":"DeepSeek (chatbot)","url":"https:\/\/en.wikipedia.org\/wiki\/DeepSeek_(c
hatbot)","sameAs":"http:\/\/www.wikidata.org\/entity\/Q132324293","mainEntity":"htt
p:\/\/www.wikidata.org\/entity\/Q132324293","author":{"@type":"Organization","nam
e":"Contributors to Wikimedia projects"},"publisher":{"@type":"Organization","nam
e":"Wikimedia Foundation, Inc.","logo":{"@type":"ImageObject","url":"https:\/\/www.w
ikimedia.org\/static\/images\/wmf-hor-googpub.png"}},"datePublished":"2025-02-04T08:
31:10Z","dateModified":"2025-05-02T18:07:00Z","headline":"chatbot"}</script>
</body>
</html>
```

Parsing

```python
soup = BeautifulSoup(response.content, "html.parser")
```

In [31]:
```python
title = soup.find("h1").text
print("Page Title:", title)
```

Page Title: DeepSeek (chatbot)

In [33]:
```python
intro_div = soup.find("div", class_="mw-parser-output")
intro_paragraphs = []
if intro_div:
    for tag in intro_div.find_all("p", recursive=False):
```

```python
        text = tag.get_text(strip=True)
        if text:
            intro_paragraphs.append(text)
        if len(intro_paragraphs) >= 2:
            break
introduction = "\n\n".join(intro_paragraphs) if intro_paragraphs else "No Introduct
print("\nIntroduction:\n", introduction)
```

Introduction:
 DeepSeek[a]is achatbotcreated by the Chinese artificial intelligence companyDeepSee
k.

Released on 10 January 2025,DeepSeek-R1surpassedChatGPTas the most downloadedfreewar
eapp on theiOS App Storein the United States by 27 January.[1]DeepSeek's success aga
inst larger and more established rivals has been described as "upending AI"[1]and in
itiating "a global AIspace race".[2]DeepSeek's compliance with Chinese governmentcen
sorship policiesand itsdata collection practiceshave also raised concerns over priva
cy and information control in the model, prompting regulatory scrutiny in multiple c
ountries. However, it has also been praised for its open weights and infrastructure
code, energy efficiency and contributions to theopen-source community.[3][4]

Extract Section Titles and First Paragraphs

```python
In [35]:  sections = soup.find_all("h2")

for section in sections:
    section_title = section.text.strip().replace("[edit]", "")
    section_content_tag = section.find_next("p")
    if section_content_tag:
        section_content = section_content_tag.text.strip()
        print(f"Section Title: {section_title}")
        print(f"Section Content: {section_content[:300]}...")
        print()
```

Section Title: Contents
Section Content: ...

Section Title: History
Section Content: On 10 January 2025, DeepSeek released the chatbot, based on the Dee
pSeek-R1 model, for iOS and Android. By 27 January, DeepSeek-R1 surpassed ChatGPT as
the most-downloaded freeware app on the iOS App Store in the United States,[1] which
resulted in an 18% drop in Nvidia's share price.[5][6] After a ...

Section Title: Usage
Section Content: DeepSeek can answer questions, solve logic problems, and write comp
uter programs on par with other chatbots, according to benchmark tests used by Ameri
can AI companies.[1]...

Section Title: Operation
Section Content: DeepSeek-V3 uses significantly fewer resources compared to its peer
s. For example, whereas the world's leading AI companies train their chatbots with s
upercomputers using as many as 16,000 graphics processing units (GPUs), DeepSeek cla
ims to have needed only about 2,000 GPUs—namely, the H800 series ...

Section Title: Reactions
Section Content: DeepSeek's success against larger and more established rivals has b
een described as "upending AI",[1] constituting "the first shot at what is emerging
as a global AI space race",[2] and ushering in "a new era of AI brinkmanship".[1
6]...

Section Title: Concerns
Section Content: DeepSeek has been reported to sometimes claim that it is ChatGPT.[4
0][41] OpenAI said that DeepSeek may have "inappropriately" used outputs from its mo
del as training data in a process called distillation.[42] However, there is current
ly no method to prove this conclusively.[43]...

Section Title: Restrictions
Section Content: Many countries have raised concerns about data security and DeepSee
k's use of personal data. On 28 January 2025, the Italian data protection authority
announced that it is seeking additional information on DeepSeek's collection and use
of personal data.[73] On the same day, the United States Nationa...

Fetch the section History

```
In [49]:  headers = soup.find_all(['h2', 'h3'])

          # Iterate through headers to find the "History" section
          history_section_found = False
          for header in headers:
              if header.get_text(strip=True).lower() == 'history':
                  history_section_found = True
                  # Start extracting paragraphs after the "History" header
                  next_node = header.find_next()
                  while next_node and next_node.name not in ['h2', 'h3']:
                      if next_node.name == 'p':
                          print(next_node.get_text())
                      next_node = next_node.find_next()
```

```python
if not history_section_found:
    print("History section not found.")
```

On 10 January 2025, DeepSeek released the chatbot, based on the DeepSeek-R1 model, for iOS and Android. By 27 January, DeepSeek-R1 surpassed ChatGPT as the most-downloaded freeware app on the iOS App Store in the United States,[1] which resulted in an 18% drop in Nvidia's share price.[5][6] After a "large-scale" cyberattack on the same day disrupted the proper functioning of its servers, DeepSeek limited its new user registration to phone numbers from mainland China, email addresses, or Google account logins.[7][8]

On 3 April 2025, in collaboration with researchers at Tsinghua University, DeepSeek published a paper unveiling a new model that combines the techniques generative reward modeling (GRM) and self-principled critique tuning (SPCT). The resulting model is referred to as DeepSeek-GRM. The goal of using these techniques is to foster more effective inference-time scaling within their LLM and chatbot services. Notably DeepSeek has said that these new models will be released and made open source.[9][10]

On 30 April 2025, Deepseek released its math-focused Artificial Intelligence Model named "DeepSeek-Prover-V2-671B". This Model is useful for formal theorem proving and mathematical reasoning.[11][12]

Extract the links

In [53]:
```python
external_links = soup.find_all("a", {"class": "external text"})
print("External Links:")
for link in external_links:
    href = link.get("href")
    if href:
        print(href)
```

External Links:
https://chat.deepseek.com/
https://www.nytimes.com/2025/01/23/technology/deepseek-china-ai-chips.html
https://search.worldcat.org/issn/0362-4331
https://web.archive.org/web/20250123102900/https://www.nytimes.com/2025/01/23/techno
logy/deepseek-china-ai-chips.html
https://abcnews.go.com/Business/nvidia-microsoft-shares-tumble-china-based-ai-app/st
ory?id=118136157
https://www.cnbc.com/2025/01/27/chinas-deepseek-ai-tops-chatgpt-app-store-what-you-s
hould-know.html
https://web.archive.org/web/20250128201052/https://www.cnbc.com/2025/01/27/chinas-de
epseek-ai-tops-chatgpt-app-store-what-you-should-know.html
https://www.cbsnews.com/news/what-is-deepseek-ai-china-stock-nvidia-nvda-asml/
https://web.archive.org/web/20250129002522/https://www.cbsnews.com/news/what-is-deep
seek-ai-china-stock-nvidia-nvda-asml/
https://www.theguardian.com/technology/2025/jan/27/deepseek-cyberattack-ai
https://www.businessinsider.com/deepseek-issues-account-registration-limited-china-p
hone-numbers-malicious-attack-2025-1
https://web.archive.org/web/20250202052738/https://www.businessinsider.com/deepseek-
issues-account-registration-limited-china-phone-numbers-malicious-attack-2025-1
https://www.scmp.com/tech/tech-trends/article/3305259/deepseek-unveils-new-ai-reason
ing-method-anticipation-its-next-gen-model-rises?module=perpetual_scroll_0&pgtype=ar
ticle
https://arxiv.org/abs/2504.02495
https://arxiv.org/archive/cs.CL
https://techcrunch.com/2025/04/30/deepseek-upgrades-its-ai-model-for-math-problem-so
lving/
https://www.scmp.com/tech/tech-trends/article/3308566/deepseek-quietly-updates-open-
source-model-handles-maths-proofs
https://economictimes.indiatimes.com/magazines/panache/deepseek-or-chatgpt-a-price-t
o-performance-comparison-what-you-need-to-know/articleshow/117636306.cms
https://api-docs.deepseek.com/quick_start/pricing
https://arxiv.org/abs/2412.19437
https://arxiv.org/archive/cs.CL
https://www.nytimes.com/2025/01/28/technology/why-deepseek-could-change-what-silicon
-valley-believes-about-ai.html
https://search.worldcat.org/issn/0362-4331
https://www.reuters.com/technology/artificial-intelligence/chinese-ai-startup-deepse
ek-overtakes-chatgpt-apple-app-store-2025-01-27/
https://thehill.com/opinion/technology/5024271-ai-sputnik-moment-china-challenge/
https://web.archive.org/web/20241208215538/https://thehill.com/opinion/technology/50
24271-ai-sputnik-moment-china-challenge/
https://www.theguardian.com/business/2025/jan/27/tech-shares-asia-europe-fall-china-
ai-deepseek
https://www.bbc.com/news/articles/c0qw7z2v1pgo
https://web.archive.org/web/20250128001127/https://www.bbc.com/news/articles/c0qw7z2
v1pgo
https://www.nytimes.com/2025/03/18/business/china-government-deepseek.html
https://search.worldcat.org/issn/0362-4331
https://www.cnn.com/2025/01/27/tech/deepseek-ai-explainer/index.html
https://web.archive.org/web/20250129183147/https://www.cnn.com/2025/01/27/tech/deeps
eek-ai-explainer/index.html
https://www.economist.com/business/2025/01/29/deepseek-poses-a-challenge-to-beijing-
as-much-as-to-silicon-valley
https://search.worldcat.org/issn/0013-0613
https://web.archive.org/web/20250131042816/https://www.economist.com/business/2025/0

1/29/deepseek-poses-a-challenge-to-beijing-as-much-as-to-silicon-valley
https://www.reuters.com/technology/artificial-intelligence/chinese-state-linked-acco
unts-hyped-deepseek-ai-launch-ahead-us-stock-rout-2025-01-31/
https://finance.sina.com.cn/jjxw/2025-01-22/doc-inefuxsi7314244.shtml
https://web.archive.org/web/20250126142226/https://finance.sina.com.cn/jjxw/2025-01-
22/doc-inefuxsi7314244.shtml
https://www.inc.com/ben-sherry/ai-leaders-in-the-u-s-react-to-deepseek-calling-it-im
pressive-but-staying-skeptical/91140125
https://web.archive.org/web/20250129211401/https://www.inc.com/ben-sherry/ai-leaders
-in-the-u-s-react-to-deepseek-calling-it-impressive-but-staying-skeptical/91140125
https://www.windowscentral.com/software-apps/microsoft-ceo-satya-nadella-touts-deeps
eeks-open-source-ai-as-super-impressive
https://web.archive.org/web/20250128095125/https://www.windowscentral.com/software-a
pps/microsoft-ceo-satya-nadella-touts-deepseeks-open-source-ai-as-super-impressive
https://thehill.com/policy/technology/5110258-openai-rival-deepseek-ai-model/
https://web.archive.org/web/20250128161932/https://thehill.com/policy/technology/511
0258-openai-rival-deepseek-ai-model/
https://www.businessinsider.com/aws-deepseek-customer-cloud-access-bedrock-stripe-to
yota-cisco-workday-2025-1
https://web.archive.org/web/20250131205127/https://www.businessinsider.com/aws-deeps
eek-customer-cloud-access-bedrock-stripe-toyota-cisco-workday-2025-1
https://www.washingtonpost.com/business/2025/01/27/deep-seek-ai-markets-nvidia/
https://web.archive.org/web/20250128030936/https://www.washingtonpost.com/business/2
025/01/27/deep-seek-ai-markets-nvidia/
https://www.axios.com/2025/01/28/trump-mike-johnson-china-deepseek-ai
https://web.archive.org/web/20250204083126/https://www.axios.com/2025/01/28/trump-mi
ke-johnson-china-deepseek-ai
https://www.nytimes.com/2025/01/27/business/us-stock-market-deepseek-ai-sp500-nvidi
a.html
https://web.archive.org/web/20250130192538/https://www.nytimes.com/2025/01/27/busine
ss/us-stock-market-deepseek-ai-sp500-nvidia.html
https://www.fortuneindia.com/technology/musk-dismisses-sam-altman-applauds-heres-wha
t-leaders-say-on-deepseeks-ai-disruption/120194
https://web.archive.org/web/20250128140632/https://www.fortuneindia.com/technology/m
usk-dismisses-sam-altman-applauds-heres-what-leaders-say-on-deepseeks-ai-disruption/
120194
https://www.financialexpress.com/business/investing-abroad-deepseek-sparks-debate-di
d-it-build-cutting-edge-ai-for-6-million-3728638/
https://www.scmp.com/tech/tech-trends/article/3293050/meet-deepseek-chinese-start-ch
anging-how-ai-models-are-trained
https://web.archive.org/web/20250122160046/https://www.scmp.com/tech/tech-trends/art
icle/3293050/meet-deepseek-chinese-start-changing-how-ai-models-are-trained
https://www.tomshardware.com/tech-industry/artificial-intelligence/chinese-ai-compan
y-says-breakthroughs-enabled-creating-a-leading-edge-ai-model-with-11x-less-compute-
deepseeks-optimizations-highlight-limits-of-us-sanctions
https://web.archive.org/web/20241228014832/https://www.tomshardware.com/tech-industr
y/artificial-intelligence/chinese-ai-company-says-breakthroughs-enabled-creating-a-l
eading-edge-ai-model-with-11x-less-compute-deepseeks-optimizations-highlight-limits-
of-us-sanctions
https://www.bbc.co.uk/news/live/cjr85l2e4l4t
https://web.archive.org/web/20250127165452/https://www.bbc.co.uk/news/live/cjr85l2e4
l4t
https://www.bloomberg.com/news/articles/2025-01-26/asia-eyes-cautious-open-as-tariff
s-remain-in-focus-markets-wrap
https://www.reuters.com/technology/chinas-deepseek-sets-off-ai-market-rout-2025-01-2
7/

https://web.archive.org/web/20250128033924/https://www.reuters.com/technology/chinas
-deepseek-sets-off-ai-market-rout-2025-01-27/
https://apnews.com/article/deepseek-ai-chatgpt-openai-copyright-a94168f3b8caa51623ce
1b75b5ffcc51
https://www.techradar.com/computing/artificial-intelligence/deepseek-just-insisted-i
ts-chatgpt-and-i-think-thats-all-the-proof-i-need
https://www.nbcnews.com/tech/tech-news/openai-says-deepseek-may-innaproriately-used-
data-rcna189872
https://theconversation.com/openai-says-deepseek-inappropriately-copied-chatgpt-but-
its-facing-copyright-claims-too-248863
https://www.telegraph.co.uk/business/2025/01/27/chinese-deepseek-ai-has-sparked-a-1-
trillion-panic/
https://search.worldcat.org/issn/0307-1235
https://www.theguardian.com/technology/2025/jan/28/we-tried-out-deepseek-it-works-we
ll-until-we-asked-it-about-tiananmen-square-and-taiwan
https://search.worldcat.org/issn/0261-3077
https://jamestown.org/program/deepseek-a-tool-tuned-for-social-governance/
https://chinamediaproject.org/2025/02/10/deepseeking-truth/
https://www.wired.com/story/deepseek-censorship/
https://www.theguardian.com/technology/2025/jan/28/chinese-ai-chatbot-deepseek-censo
rs-itself-in-realtime-users-report
https://search.worldcat.org/issn/0261-3077
https://www.techradar.com/computing/artificial-intelligence/want-to-try-deepseek-wit
hout-the-privacy-worries-perplexity-ai-just-launched-it-on-its-ios-and-web-apps
https://www.telegraph.co.uk/business/2025/01/27/chinese-deepseek-ai-has-sparked-a-1-
trillion-panic/
https://search.worldcat.org/issn/0307-1235
https://web.archive.org/web/20250127142008/https://www.telegraph.co.uk/business/202
5/01/27/chinese-deepseek-ai-has-sparked-a-1-trillion-panic/
https://www.trendingtopics.eu/deepseek-this-is-what-live-censorship-looks-like-in-th
e-chinese-ai-chatbot/
https://web.archive.org/web/20250127144208/https://www.trendingtopics.eu/deepseek-th
is-is-what-live-censorship-looks-like-in-the-chinese-ai-chatbot/
https://www.theguardian.com/technology/2025/jan/28/we-tried-out-deepseek-it-works-we
ll-until-we-asked-it-about-tiananmen-square-and-taiwan
https://search.worldcat.org/issn/0261-3077
https://chinamediaproject.org/2025/02/10/deepseeking-truth/
https://www.theguardian.com/commentisfree/2025/jan/26/the-guardian-view-on-a-global-
ai-race-geopolitics-innovation-and-the-rise-of-chaos
https://search.worldcat.org/issn/0261-3077
https://www.nbcnews.com/tech/tech-news/china-ai-assistant-deepseek-rcna189385
https://www.biometricupdate.com/202501/chinas-deepseek-ai-poses-formidable-cyber-dat
a-privacy-threats
https://www.theguardian.com/technology/2025/jan/28/experts-urge-caution-over-use-of-
chinese-ai-deepseek
https://search.worldcat.org/issn/0261-3077
https://www.laptopmag.com/ai/deepseeks-success-has-painted-a-huge-tiktok-shaped-targ
et-on-its-back
https://web.archive.org/web/20250128142525/https://www.laptopmag.com/ai/deepseeks-su
ccess-has-painted-a-huge-tiktok-shaped-target-on-its-back
https://www.wired.com/story/deepseek-ai-china-privacy-data/
https://search.worldcat.org/issn/1059-1028
https://web.archive.org/web/20250127232432/https://www.wired.com/story/deepseek-ai-c
hina-privacy-data/
https://web.archive.org/web/20250218135802/https://en.yna.co.kr/view/AEN202502180053
00315

https://en.yna.co.kr/view/AEN20250218005300315
https://www.reuters.com/technology/south-koreas-data-protection-authority-suspends-l
ocal-service-deepseek-2025-02-17/
https://www.forbes.com/sites/larsdaniel/2025/02/01/deepseek-data-leak-exposes--10000
00-sensitive-records/
https://www.wiz.io/blog/wiz-research-uncovers-exposed-deepseek-database-leak
https://www.rfa.org/english/china/2025/04/24/china-deep-seek-south-korea-user-data/
https://www.wsj.com/tech/ai/china-deepseek-ai-dangerous-information-e8eb31a8
https://archive.today/20250209235331/https://www.wsj.com/tech/ai/china-deepseek-ai-d
angerous-information-e8eb31a8
https://arstechnica.com/security/2025/02/deepseek-ios-app-sends-data-unencrypted-to-
bytedance-controlled-servers/
https://krebsonsecurity.com/2025/02/experts-flag-security-privacy-risks-in-deepseek-
ai-app/
https://www.reuters.com/technology/artificial-intelligence/alibaba-chinese-state-fun
ds-interested-investing-deepseek-information-reports-2025-02-19/
https://www.tradingkey.com/news/more-news/250387930-reuters
https://x.com/deepseek_ai/status/1892786555494019098
https://www.bloomberg.com/news/articles/2025-02-21/deepseek-promises-to-share-even-m
ore-ai-code-in-a-rare-step
https://www.reuters.com/technology/artificial-intelligence/italy-regulator-seeks-inf
o-deepseek-data-protection-2025-01-28/
https://www.reuters.com/technology/artificial-intelligence/white-house-evaluates-chi
na-ai-app-deepseeks-affect-national-security-official-2025-01-28/
https://www.cnbc.com/2025/01/28/us-navy-restricts-use-of-deepseek-ai-imperative-to-a
void-using.html
https://www.reuters.com/technology/artificial-intelligence/italys-privacy-watchdog-b
locks-chinese-ai-app-deepseek-2025-01-30/
https://www.reuters.com/technology/artificial-intelligence/taiwan-says-government-de
partments-should-not-use-deepseek-citing-security-2025-01-31/
https://www.reuters.com/technology/artificial-intelligence/dutch-privacy-watchdog-la
unch-investigation-into-chinas-deepseek-ai-2025-01-31/
https://apnews.com/article/texas-deepseek-apps-ban-3828a4743e9919398dfac0ba9d4a5c25
https://ia.acs.org.au/article/2025/nsw-govt-blocks-access-to-deepseek-ai.html
https://web.archive.org/web/20250204130742/https://ia.acs.org.au/article/2025/nsw-go
vt-blocks-access-to-deepseek-ai.html
https://www.bbc.com/news/articles/c8d95v0nr1yo
https://fortune.com/asia/2025/02/06/south-korea-blocks-deepseek-government-devices-c
hina-ai-taiwan-australia/
https://nationalpost.com/news/canada/federal-government-bans-chinese-ai-startup-deep
seek-on-public-service-devices
https://m.yna.co.kr/view/AKR20250217066600530
http://web.archive.org/web/20250323140252/https://www.reuters.com/technology/artific
ial-intelligence/us-commerce-department-bureaus-ban-chinas-deepseek-government-devic
es-sources-2025-03-17/
https://www.reuters.com/technology/artificial-intelligence/us-commerce-department-bu
reaus-ban-chinas-deepseek-government-devices-sources-2025-03-17/
https://chat.deepseek.com/
https://wikimediafoundation.org/

References

```
In [55]:  references = []
          for ref in soup.find_all("cite"):
              link = ref.find("a", href=True)
              if link:
```

```python
        references.append(link['href'])
print("\nReferences:")
for ref in references:
    print(ref)
```

References:
https://www.nytimes.com/2025/01/23/technology/deepseek-china-ai-chips.html
https://abcnews.go.com/Business/nvidia-microsoft-shares-tumble-china-based-ai-app/st
ory?id=118136157
https://www.cnbc.com/2025/01/27/chinas-deepseek-ai-tops-chatgpt-app-store-what-you-s
hould-know.html
https://www.cbsnews.com/news/what-is-deepseek-ai-china-stock-nvidia-nvda-asml/
https://www.theguardian.com/technology/2025/jan/27/deepseek-cyberattack-ai
https://www.businessinsider.com/deepseek-issues-account-registration-limited-china-p
hone-numbers-malicious-attack-2025-1
https://www.scmp.com/tech/tech-trends/article/3305259/deepseek-unveils-new-ai-reason
ing-method-anticipation-its-next-gen-model-rises?module=perpetual_scroll_0&pgtype=ar
ticle
/wiki/ArXiv_(identifier)
https://techcrunch.com/2025/04/30/deepseek-upgrades-its-ai-model-for-math-problem-so
lving/
https://www.scmp.com/tech/tech-trends/article/3308566/deepseek-quietly-updates-open-
source-model-handles-maths-proofs
https://economictimes.indiatimes.com/magazines/panache/deepseek-or-chatgpt-a-price-t
o-performance-comparison-what-you-need-to-know/articleshow/117636306.cms
https://api-docs.deepseek.com/quick_start/pricing
/wiki/ArXiv_(identifier)
https://www.nytimes.com/2025/01/28/technology/why-deepseek-could-change-what-silicon
-valley-believes-about-ai.html
https://www.reuters.com/technology/artificial-intelligence/chinese-ai-startup-deepse
ek-overtakes-chatgpt-apple-app-store-2025-01-27/
https://thehill.com/opinion/technology/5024271-ai-sputnik-moment-china-challenge/
https://www.theguardian.com/business/2025/jan/27/tech-shares-asia-europe-fall-china-
ai-deepseek
https://www.bbc.com/news/articles/c0qw7z2v1pgo
https://www.nytimes.com/2025/03/18/business/china-government-deepseek.html
https://www.cnn.com/2025/01/27/tech/deepseek-ai-explainer/index.html
https://www.economist.com/business/2025/01/29/deepseek-poses-a-challenge-to-beijing-
as-much-as-to-silicon-valley
https://www.reuters.com/technology/artificial-intelligence/chinese-state-linked-acco
unts-hyped-deepseek-ai-launch-ahead-us-stock-rout-2025-01-31/
https://finance.sina.com.cn/jjxw/2025-01-22/doc-inefuxsi7314244.shtml
https://www.inc.com/ben-sherry/ai-leaders-in-the-u-s-react-to-deepseek-calling-it-im
pressive-but-staying-skeptical/91140125
https://www.windowscentral.com/software-apps/microsoft-ceo-satya-nadella-touts-deeps
eeks-open-source-ai-as-super-impressive
https://thehill.com/policy/technology/5110258-openai-rival-deepseek-ai-model/
https://www.businessinsider.com/aws-deepseek-customer-cloud-access-bedrock-stripe-to
yota-cisco-workday-2025-1
https://www.washingtonpost.com/business/2025/01/27/deep-seek-ai-markets-nvidia/
https://www.axios.com/2025/01/28/trump-mike-johnson-china-deepseek-ai
https://www.nytimes.com/2025/01/27/business/us-stock-market-deepseek-ai-sp500-nvidi
a.html
https://www.fortuneindia.com/technology/musk-dismisses-sam-altman-applauds-heres-wha
t-leaders-say-on-deepseeks-ai-disruption/120194
https://www.financialexpress.com/business/investing-abroad-deepseek-sparks-debate-di
d-it-build-cutting-edge-ai-for-6-million-3728638/
https://www.scmp.com/tech/tech-trends/article/3293050/meet-deepseek-chinese-start-ch
anging-how-ai-models-are-trained
https://www.tomshardware.com/tech-industry/artificial-intelligence/chinese-ai-compan
y-says-breakthroughs-enabled-creating-a-leading-edge-ai-model-with-11x-less-compute-

deepseeks-optimizations-highlight-limits-of-us-sanctions
https://www.bbc.co.uk/news/live/cjr85l2e4l4t
https://www.bloomberg.com/news/articles/2025-01-26/asia-eyes-cautious-open-as-tariffs-remain-in-focus-markets-wrap
https://www.reuters.com/technology/chinas-deepseek-sets-off-ai-market-rout-2025-01-27/
https://apnews.com/article/deepseek-ai-chatgpt-openai-copyright-a94168f3b8caa51623ce1b75b5ffcc51
https://www.techradar.com/computing/artificial-intelligence/deepseek-just-insisted-its-chatgpt-and-i-think-thats-all-the-proof-i-need
https://www.nbcnews.com/tech/tech-news/openai-says-deepseek-may-inapproriately-used-data-rcna189872
https://theconversation.com/openai-says-deepseek-inappropriately-copied-chatgpt-but-its-facing-copyright-claims-too-248863
https://www.telegraph.co.uk/business/2025/01/27/chinese-deepseek-ai-has-sparked-a-1-trillion-panic/
https://www.theguardian.com/technology/2025/jan/28/we-tried-out-deepseek-it-works-well-until-we-asked-it-about-tiananmen-square-and-taiwan
https://jamestown.org/program/deepseek-a-tool-tuned-for-social-governance/
https://chinamediaproject.org/2025/02/10/deepseeking-truth/
https://www.wired.com/story/deepseek-censorship/
https://www.theguardian.com/technology/2025/jan/28/chinese-ai-chatbot-deepseek-censors-itself-in-realtime-users-report
https://www.techradar.com/computing/artificial-intelligence/want-to-try-deepseek-without-the-privacy-worries-perplexity-ai-just-launched-it-on-its-ios-and-web-apps
https://www.telegraph.co.uk/business/2025/01/27/chinese-deepseek-ai-has-sparked-a-1-trillion-panic/
https://www.trendingtopics.eu/deepseek-this-is-what-live-censorship-looks-like-in-the-chinese-ai-chatbot/
https://www.theguardian.com/technology/2025/jan/28/we-tried-out-deepseek-it-works-well-until-we-asked-it-about-tiananmen-square-and-taiwan
https://chinamediaproject.org/2025/02/10/deepseeking-truth/
https://www.theguardian.com/commentisfree/2025/jan/26/the-guardian-view-on-a-global-ai-race-geopolitics-innovation-and-the-rise-of-chaos
https://www.nbcnews.com/tech/tech-news/china-ai-assistant-deepseek-rcna189385
https://www.biometricupdate.com/202501/chinas-deepseek-ai-poses-formidable-cyber-data-privacy-threats
https://www.theguardian.com/technology/2025/jan/28/experts-urge-caution-over-use-of-chinese-ai-deepseek
https://www.laptopmag.com/ai/deepseeks-success-has-painted-a-huge-tiktok-shaped-target-on-its-back
https://www.wired.com/story/deepseek-ai-china-privacy-data/
https://web.archive.org/web/20250218135802/https://en.yna.co.kr/view/AEN20250218005300315
https://www.reuters.com/technology/south-koreas-data-protection-authority-suspends-local-service-deepseek-2025-02-17/
https://www.forbes.com/sites/larsdaniel/2025/02/01/deepseek-data-leak-exposes--1000000-sensitive-records/
https://www.wiz.io/blog/wiz-research-uncovers-exposed-deepseek-database-leak
https://www.rfa.org/english/china/2025/04/24/china-deep-seek-south-korea-user-data/
https://www.wsj.com/tech/ai/china-deepseek-ai-dangerous-information-e8eb31a8
https://arstechnica.com/security/2025/02/deepseek-ios-app-sends-data-unencrypted-to-bytedance-controlled-servers/
https://krebsonsecurity.com/2025/02/experts-flag-security-privacy-risks-in-deepseek-ai-app/
https://www.reuters.com/technology/artificial-intelligence/alibaba-chinese-state-fun

```
ds-interested-investing-deepseek-information-reports-2025-02-19/
https://www.tradingkey.com/news/more-news/250387930-reuters
https://x.com/deepseek_ai/status/1892786555494019098
https://www.bloomberg.com/news/articles/2025-02-21/deepseek-promises-to-share-even-m
ore-ai-code-in-a-rare-step
https://www.reuters.com/technology/artificial-intelligence/italy-regulator-seeks-inf
o-deepseek-data-protection-2025-01-28/
https://www.reuters.com/technology/artificial-intelligence/white-house-evaluates-chi
na-ai-app-deepseeks-affect-national-security-official-2025-01-28/
https://www.cnbc.com/2025/01/28/us-navy-restricts-use-of-deepseek-ai-imperative-to-a
void-using.html
https://www.reuters.com/technology/artificial-intelligence/italys-privacy-watchdog-b
locks-chinese-ai-app-deepseek-2025-01-30/
https://www.reuters.com/technology/artificial-intelligence/taiwan-says-government-de
partments-should-not-use-deepseek-citing-security-2025-01-31/
https://www.reuters.com/technology/artificial-intelligence/dutch-privacy-watchdog-la
unch-investigation-into-chinas-deepseek-ai-2025-01-31/
https://apnews.com/article/texas-deepseek-apps-ban-3828a4743e9919398dfac0ba9d4a5c25
https://ia.acs.org.au/article/2025/nsw-govt-blocks-access-to-deepseek-ai.html
https://www.bbc.com/news/articles/c8d95v0nr1yo
https://fortune.com/asia/2025/02/06/south-korea-blocks-deepseek-government-devices-c
hina-ai-taiwan-australia/
https://nationalpost.com/news/canada/federal-government-bans-chinese-ai-startup-deep
seek-on-public-service-devices
https://m.yna.co.kr/view/AKR20250217066600530
http://web.archive.org/web/20250323140252/https://www.reuters.com/technology/artific
ial-intelligence/us-commerce-department-bureaus-ban-chinas-deepseek-government-devic
es-sources-2025-03-17/
```

Sentiment analysis

In [73]:
```python
from textblob import TextBlob
```

In [75]:
```python
# Get the page text
page_text = soup.get_text()

# Step 3: Clean up the extracted text (optional)
# Remove extra newlines and spaces
page_text = ' '.join(page_text.split())

# Step 4: Perform Sentiment Analysis with TextBlob
blob = TextBlob(page_text)

# Step 5: Output the sentiment analysis results
print("Sentiment Analysis Result:")
print(f"Polarity: {blob.sentiment.polarity}")  # Range: -1 (negative) to 1 (positiv
print(f"Subjectivity: {blob.sentiment.subjectivity}")  # Range: 0 (objective) to 1
```

```
Sentiment Analysis Result:
Polarity: 0.09721527198591419
Subjectivity: 0.3768874856030817
```

Polarity: 0.097 — The sentiment of the entire article is slightly positive, but not very strong. A polarity close to 0 means it's fairly neutral, with a slight tendency toward positive sentiment.

Subjectivity: 0.377 — The article is somewhat objective (close to 0), with some level of subjectivity, as expected for a Wikipedia page. This indicates that the article contains a mix of factual content and potentially opinion-based information.

In [ ]: