Extracting data from the World Wide Web (WWW) has become an important issue in the last few years as the number of web pages available on the visible Internet has grown to billions of pages with trillions of pages available from the invisible web. Tools and protocols to extract all this information have now come in demand as researchers as well as web browsers and surfers want to discover new knowledge at an ever increasing rate! As robots (bots) and intelligent agents are at the heart of many extraction tools I decided to create a compilation of the latest sources and sites that extract information from the web.

**Web Data Extractors 2019:**

80legs - Powerful and Economical Service Platform for Crawling and Processing Web Content
http://www.80legs.com/

Agenty – Hosted Web Scraping Tool
https://www.agenty.com/

Anthracite
http://freecode.com/projects/anthracite

Apify – Web Scraping Platform for Coders
https://www.apify.com/

Aristo - Answer Questions with a Knowledgeable Machine
http://allenai.org/aristo/

artoo.js - The Client-Side Scraping Companion
http://medialab.github.io/artoo/
AutoMate - Automate Data Extraction
https://www.networkautomation.com/

Automated RSS Scraper Scripts
http://www.djeaux.com/rss/

Automated Information Solutions
http://www.automated-info-solutions.com/

Automatic Information Extraction From Semi-Structured Web Pages By Pattern Discovery
http://portal.acm.org/citation.cfm?id=640423&dl=ACM&coll=portal

Beautiful Soup
http://freecode.com/projects/beautifulsoup

Beautiful Soup - HTML/XML Parser for Quick Turnaround Screen Scraping and Web Data Extraction
http://www.crummy.com/software/BeautifulSoup/

Big Data: What Is Web Scraping and How To Use It
https://itsvit.com/blog/big-data-what-is-web-scraping-and-how-to-use-it-it-svit-blog/

blia solutions Weather Predictive Analytics
http://www.bliasolutions.com/

Bot Research 2019
http://www.BotResearch.info/

BYU Data Extraction Research Group
http://www.deg.byu.edu/

Captiva Software: OpenText Captiva – Capture and Transform Content
http://www.emc.com/enterprise-content-management/captiva/captiva.htm

Client-Side Deep Web Data Extraction

CloudScrape – Extract, Enrich and Connect
http://www.cloudscrape.com/
Cogitum Co-Citer
http://www.cogitum.com/co-tracker-text/more.shtml

Common Crawl
http://www.commoncrawl.org/

Connoteate – Web Data Extraction and Monitoring
http://www.connoteate.com/

Content Grabber – Extract Data from Websites
http://www.ContentGrabber.com/

ContextMiner - Tools to Collect Data, Metadata and Contextual Information
http://www.contextminer.org/

cQuery - Content Query Engine
http://cquery.com/

CrawlMonster
http://www.crawlmonster.com/

Crawly
http://crawly.diffbot.com/

Create a Crawler - Extract Data From an Entire Website
https://www.import.io/

cURL groks URLs - Command Line Tool for Transferring Data
http://curl.haxx.se/

Data Extraction Services
http://www.dataextractionservices.com/

DataHen – Advanced Web Scraping and Data Extraction Services
https://www.datahen.com/

Data Mining Resources 2019
http://www.DataMiningResources.info/

Data Miner – Extract Data From any Website in Seconds
https://data-miner.io/
Dataminr - Real-time Information Discovery
http://www.dataminr.com/

Data Scraper – East Web Scraping with Google Chrome
https://chrome.google.com/webstore/detail/data-scraper-easy-web-scr/nndknepjnlbdbebpfjemnchggmopgden?hl=en-US

DataSift - Powerful Social Data Platform
http://datasift.com/

Data Toolbar – Web Data Extraction Software Made Simple
http://datatoolbar.com/

DataWatch Monarch – Self-Service Data Preparation
http://www.datawatch.com/

DataWrangler - Data Cleaning and Transformation Tool
http://vis.stanford.edu/wrangler/

Deep Web Research 2019
http://www.DeepWebResearch.info/

DEiXTo – Powerful Web Data Extraction Tool Based on W3C DOM
http://deixto.com/

dexi.io – Web Data Processing for Professionals – Extract, Enrich and Connect
https://dexi.io/

DiffBot – Web Data Extraction Using Artificial Intelligence
http://www.DiffBot.com/

Diggernaut - Data Scraping - Turn Website Content Into Datasets
https://www.diggernaut.com/

Digital Footprints - Collect Facebook Data
http://digitalfootprints.dk/

DiscoverText - Import, Sort, Distribute and Analyze Electronic Content from eMail, Document Repositories, and Social Media
http://discovertext.com/
Easy PDF Cloud
https://www.easypdfcloud.com/

Easy Web Extract – Best Tool for Web Scraping
http://webextract.net/

eGrabber - Data Capture Tools
http://www.egrabber.com/

Facepager - Fetching Public Data From Facebook
https://github.com/strohne/Facepager

FeedsAPI - Extract Content from Web Pages Tool
http://www.feedsapi.com/

Ficstar Software - Web Data Extraction
http://www.ficstar.com/

File Information Tool Set (FITS)
https://projects.iq.harvard.edu/fits

FMiner – Web Scraping Software
http://www.fminer.com/

Focusboard.io - Discover the Internet Free of Distractions
https://focusboard.io/

Fresh WebSuction
http://www.freshwebmaster.com/

GetData.io - Get Valuable Data from the Web in 3 Steps
https://getdata.io/

Grepser – Web Scraping Made Simple, Fast and Manageable
https://www.grepser.com/

Helium Scraper
http://www.heliumscraper.com/

How to Scrape Data from a Website Using Python
https://www.codementor.io/oluwagbengajoloko/how-to-scrape-data-from-a-website-using-python-n3fimtc63q
Huginn - Your Agents Are Standing By
https://github.com/cantino/huginn

Hunter - Connect With Anyone
https://hunter.io/

HYPHE - Web Corpus Curation Tool Featuring A Research-Driven Web Crawler
http://hyphe.medialab.sciences-po.fr/

iMacros – Data Extraction
http://imacros.net/overview

Imagination Engines
http://www.Imagination-Engines.com/

Import.io - Turn the Web Into Data With Extractors, Crawlers and Connectors
https://import.io/

InfoExtractor - Extracts Relevant Information from Blogs, YouTube and Twitter
http://www.infoextractor.org/

Information Retrieval (IR) and Information Extraction (IE) on the Web
http://www.webir.org/

Introduction to Information Retrieval

Introduction to Web Scraping Using Python
https://github.com/qut-dmrc/web-scraping-intro-workshop

iOpus Internet Macros
http://www.iopus.com/imacros/

iRobotSoft – Visual Web Scraping and Web Automation
http://irobotsoft.com/

iWeb Scraping Services
http://www.iwebscraping.com/

Jaspersoft® ETL - The Open Source Data Integration Platform
https://community.jaspersoft.com/project/jaspersoft- etl
Junar - Discovering Data
http://www.junar.com/

Karma - Data Integration Tool
http://www.isi.edu/integration/karma/

Kimono - Turn Website Into Structured APIs From Your Browser In Seconds
https://www.kimonolabs.com/

Knowledge Discovery Resources 2019
http://www.KnowledgeDiscovery.info/

Knowlesys® - Web Data Extraction, Web Grabber and Screen Scraper
http://www.knowlesys.com/index.htm

Liberty Metrics – Web Scraping Services
http://libertymetrics.com/

LingPipe – Information Extraction and Data Mining Tools
http://alias-i.com/lingpipe/

Listly - Fully Automated Web Scraping Service
http://listly.io/

Metadata Extraction Tool
http://meta-extractor.sourceforge.net/

Mozenda – Comprehensive Web Data Gathering
http://www.mozenda.com/

NCapture - Capture Web Content

Netlytic - Making Sense of Online Conversations
https://netlytic.org/home/

Newprosoft – Web Data Extraction Software
http://newprosoft.com/

NewsClipper.com - Snip and Ship Dynamic News Content to Your Web Pages
http://www.newsclipper.com/
Octoparse – Automated Web Scraping Software
http://www.octoparse.com/

Online Data Extractor Tool
http://www.onlinedataextractor.com/

Open Datasets
http://www.DataPortals.org/
https://github.com/caesar0301/awesome-public-datasets
https://www.kaggle.com/datasets
https://www.data.gov/
https://aws.amazon.com/public-datasets/
https://data.world/
http://data.worldbank.org/
http://www.OpenDataSets.info/

OutWit Hub - Harvest the Web With Your Own Web Collection Engine
http://www.outwit.com/

ParseHub – Web Crawling Using Machine Learning
http://www.ParseHub.com/

Pervasive Data Management and Integration Products
http://www.pervasive.com/

Priceonomics - Crawl Data From the Web
http://priceonomics.com/

Proxycrawl - Stay Anonymous While Crawling the Web
https://proxycrawl.com/

QL2 Software - Unstructured Data Management and Web Mining Software
http://www.ql2.com/

Quick Code
https://quickcode.io/

re3data.org - 2,000 Data Repositories
https://www.re3data.org/
REBOL Technologies
http://www.rebol.com/

ReVerb - Open Information Extraction Software
http://reverb.cs.washington.edu/

SalesTools.io
https://salestools.io/

Semantic Scholar - Free Scientific Literature Search and Discovery
http://allenai.org/semantic-scholar/

ScrapeForge
http://freecode.com/projects/scrapeforge

ScrapeHero
https://www.scrapehero.com/

Scraper
http://freecode.com/projects/scraper

ScrapingHub – Cloud Based Data Extraction Tool
http://www.ScrapingHub.com/

Scraping Solutions – When the Solution You Seek Seems Impossible

Scrapy – Open Source Web Scraping Framework for Python
http://scrapy.org/

Screen-Scraper
http://freecode.com/projects/screenscraper

Screen-Scraper – Extracts Information From Web Sites
http://www.Screen-Scraper.com/

Screenscraping the Senate by Paul Ford

Search and Replace with TextPipe Pattern Matching
http://www.datamystic.com/textpipe.html
Sensible Code
http://sensiblecode.io/

Social Media Data Collection Tools
http://socialmediadata.wikidot.com/

Software for Web Scraping
http://scraping.pro/software-for-web-scraping/

Spinn3r - Indexing the Blogosphere
http://docs.spinn3r.com/#overview

SPSS Modeler
http://developer.ibm.com/predictiveanalytics

Squirro - Find, Remember, Organize and Share Important Information
https://squirro.com/

STACKS - Social Media Tracker, Analyzer, & Collector Toolkit at Syracuse
https://github.com/bitslabsyr/stack

TadaWeb - Clone and Amplify Human Intelligence for Web Data Collection and Analysis
https://www.tadaweb.com/

Texifter - Search, Sift, Sort, Classify and Analyze
http://texifter.com/

TextConverter 4
https://www.simx.com/

TextRazor - Text Analysis Infrastructure
https://www.textrazor.com/

Topicgrazer - Graze On Web Pages and Documents

UiPath – Web Data Extraction
https://www.uipath.com/guides/web-data-extraction

Unit Miner - Web Data Extraction Software
http://www.unitminer.com/
VietSpider  
http://binhgiang.sourceforge.net/

Visual Web Ripper – Data Extraction Software  

Visual Web Task  
http://www.lencom.com/VisualWTSite.html

W3C Publishes Data Extraction Language (DEL) as W3C Note  

Web Content Extractor  
http://www.newprosoft.com/

Web Data Extraction  
https://www.wintask.com/web-data-extraction-feature/

Web Data Extraction Software Data Toolbar  
https://webdataextractionsoftwaredatatoolbar.en.softonic.com/

Web Data Extractor  
http://www.rafasoft.com/

Web Data Extractor  
http://www.webextractor.com/

Web Data Extractor  
http://fivesmallq.github.io/web-data-extractor

Web Data Extractor  

Web Data Extractors 2019  
http://www.WebDataExtractors.info/

Web Data Guru – Web Data Extraction and Scraping Services  
http://www.webdataguru.com/

Web-Harvest – Open Source Web Data Extraction Tool  
http://web-harvest.sourceforge.net/index.php
WebHarvy – Intuitive Powerful Visual Web Scraper
https://www.webharvy.com/index.html

Webhose.io – Web Data For Your Business
http://www.webhose.io/

Web Robots – Web Scraping and Crawling
https://webrobots.io/

Web Scraper
http://www.webscraper.io/

https://en.wikipedia.org/wiki/Web_scraping

Website Data Extractor – Time to Rethink Web Scraping
http://www.kofax.com/

Website Downloader
https://websitedownloader.io/

Website Extractor – Offline Browser

WebSunDew – Advanced Web Scraping Tool
http://www.websundew.com/

Wikimedia Public Data Dumps
http://meta.wikimedia.org/wiki/Data_dumps

WinAutomation
http://www.winautomation.com/

XRay Web Scraping Tool
http://freecode.com/projects/xrayguibasedwebscrapingtool

YaCy Web page Indexer
http://freecode.com/projects/yacy
Subject Tracer™ Information Blogs

Subject Tracer™ Information Blogs created and developed by the Virtual Private Library™ combine the best of the latest tools on the Internet. Using bots, blogs and news aggregators the Subject Tracer™ Information blogs generate RSS feeds with the latest resources to create a current information resource flow through niched subject tracers. I am proud to be the creator of the Internet’s first Subject Tracer™ Information Blogs:

Virtual Private Library™
http://www.VirtualPrivateLibrary.com/

Accessibility Resources
http://www.AccessibilityResources.info/

Agriculture Resources
http://www.AgricultureResources.info/

AnswerSpot
http://www.AnswerSpot.us/

Artificial Intelligence Resources
http://www.AIResources.info/

Astronomy Resources
http://www.AstronomyResources.info/

Auction Resources
http://www.AuctionResources.info/

Biological Informatics
http://www.BiologicalInformatics.info/

Biotechnology Resources
http://www.BiotechnologyResources.info/

Bot Research
http://www.BotResearch.info/

Business Intelligence Resources
http://www.BIResources.info/
ChatterBots
http://www.ChatterBots.info/

Data Mining Resources
http://www.DataMiningResources.info/

Deep Web Research
http://www.DeepWebResearch.info/

Directory Resources
http://www.DirectoryResources.info/

eCommerce Resources
http:// eCommerceResources.info/

Education and Academic Resources
http://www.EducationResources.info/

Elder Resources
http://www.ElderResources.info/

Employment Resources
http://www.EmploymentResources.info/

Entrepreneurial Resources
http://www.EntrepreneurialResources.info/

Fact Checkers Directory
http://www.FactCheckers.info/

Financial Sources
http://www.FinancialSources.info/

Finding People
http://www.FindingPeople.info/

Games Resources
http://www.GamesResources.info/

Genealogy Resources
http://www.GenealogyResources.info/
Grant Resources
http://www.GrantResources.info/

Green Files
http://www.GreenFiles.info/

Grid, Distributed and Cloud Computing Resources
http://www.GridResources.info/

Healthcare Resources
http://www.HealthcareResources.info/

Information Futures Markets
http://www.InformationFuturesMarkets.com/

Information Quality Resources
http://www.InformationQualityResources.info/

International Trade Resources
http://www.InternationalTradeResources.info/

Internet Alerts
http://www.InternetAlerts.info/

Internet Demographics
http://www.InternetDemographics.info/

Internet Experts
http://www.InternetExperts.info/

Internet Hoaxes
http://www.InternetHoaxes.info/

Intrapreneurial Resources
http://www.IntrapreneurialResources.info/

Journalism Resources
http://www.JournalismResources.info/

Knowledge Discovery
http://www.KnowledgeDiscovery.info/
Military Resources
http://www.MilitaryResources.info/

New Economy Analytics, Resources and Alerts
http://www.NewEconomyAnalytics.com/

Outsourcing/Offshoring Information and Resources
http://www.OutsourcingOffshore.us/

Privacy Resources
http://www.PrivacyResources.info/

Reference Resources
http://www.ReferenceResources.info/

Research Resources
http://www.ResearchResources.info/

RestStress™
http://www.RestStress.com/

Script Resources
http://www.ScriptResources.info/

ShoppingBots
http://www.ShoppingBots.info/

Social Informatics
http://www.SocialInformatics.info/

Statistics Resources and Big Data
http://www.StatisticsResources.info/

Student Research
http://www.StudentResearch.info/

Theology Resources
http://www.TheologyResources.info/

Tutorial Resources
http://www.TutorialResources.info/
World Wide Web Reference
http://www.WWWReference.info/

Author Information: Marcus P. Zillman, M.S., A.M.H.A. Executive Director of the Virtual Private Library is an international Internet expert, author, keynote speaker and corporate consultant in the area of information retrieval, knowledge discovery, knowledge harvesting, artificial intelligence and bots/intelligent agents. He has created numerous world wide web sites including 54 Subject Tracer™ Information Portals and Blogs; written a number of internet miniguides, white papers, manuals and books; hosted over 160 weekly Internet television shows, writes a weekly and monthly column on Current Awareness on the Internet; writes a monthly newsletter Awareness Watch and delivers keynote presentations throughout the international marketplace. He also actively delivers one and two day workshops for key industry sectors displaying how the Internet can be used as a tool to maintain current awareness and professional competencies.

Additional websites by Marcus P. Zillman, M.S., A.M.H.A.:

Marcus P. Zillman's Blog (20,000+ Postings)
http://www.zillman.us/

Marcus P. Zillman Abbreviated Bio
http://www.zillman.info/
White Papers by Marcus P. Zillman
http://www.WhitePapers.us/

Internet MiniGuides™
http://www.InternetMiniGuide.com/

Awareness Watch™ Newsletter
http://www.AwarenessWatch.com/

Marcus P. Zillman's Columns
http://www.ZillmanColumns.com

LinkSeries Publications
http://www.LinkSeries.com/

Links By Marcus™
http://www.LinksByMarcus.com/

Workshops By Marcus™
http://www.WorkshopsByMarcus.com/

SourceSeries Internet Research Workshops
http://www.SourceSeries.com/

Watch Marcus™
http://www.WatchMarcus.com/

listen to marcus™
http://www.ListenToMarcus.com

Research White Papers, Articles, Lectures and Speeches by Marcus P. Zillman, M.S., A.M.H.A.:

2018 Directory of Directories

Academic and Scholar Search Engines and Sources
http://www.ScholarSearchEngines.com/

Bots, Blogs and News Aggregators 2019
http://www.BotsBlogs.com/
Business Intelligence Online Resources 2018
http://www.BIOnlineResources.info/

Cloud Computing Resources Primer 2018
http://www.zillman.us/white-papers/grid-distributed-and-cloud-computing-resources-primer/

Current Awareness Discovery Tools on the Internet 2019

Deep Web Research and Discovery Resources 2019 Online White Paper
http://DeepWeb.us/

eMarketing MiniGuide 2019
http://www.eMarketingMiniGuide.com/

eReference Library Link Toolkit 2018
http://www.eReferenceLibrary.com/

Finding Experts By Using the Internet 2019
http://www.FindingExperts.info/

Finding People Resources and Sites 2019
http://www.FindingPeople.info/

Healthcare Bots and Subject Directories 2019
http://www.HealthcareBots.info/

Knowledge Discovery Resources 2019
http://www.KDResources.info/

New Economy Resources 2019
http://www.NewEconomyResources.com/

Online Research Browsers 2018
http://www.zillman.us/white-papers/online-research-browsers/

Online Research Tools
http://www.OnlineResearchTools.info/

Online Social Networking 2018
http://www.OnlineSocialNetworking.info/
and/or business activity as the list of URLs will keep you at the leading edge of your career.

**Market Intelligence Resources**
http://www.MarketIntelligenceResources.com/
Marcus P. Zillman’s just released professional Internet MiniGuide is titled Market Intelligence Resources and is available for purchase online and immediate download. This 193 page digital miniguide represents a comprehensive listing of the latest resources, sources and sites to discover the latest Market Intelligence sources available on the Internet with many of them freely available! Designed specifically for today’s entrepreneur, professional and/or investor.

**Entrepreneurial Links 101**
http://www.EntrepreneurialLinks.com/
Marcus P. Zillman’s newly released 231 page eReference digital book for the up and coming entrepreneur. Entrepreneurial Links 101 gives an alphabetical listing of the very best Internet and World Wide Web sites covering Entrepreneur Resources, Business Intelligence Resources and an extremely comprehensive list of Online Research Tools. This is considered by many to be the entrepreneur’s bible for finding relevant and competent online resources!

**Internet Privacy and Security Resources**
http://www.InternetPrivacySecurity.net/
Marcus P. Zillman’s latest eReference digital publication is a selected comprehensive alphabetical listing of the latest resources and sites covering all aspects of privacy and security currently available over the Internet. From the board room to the family room, these resources and sites give you the information you need to maintain your privacy and security as you use the Internet in your business and personal life.

**Research Resources Online Guide**
http://www.ResearchResourcesOnline.net/
Marcus P. Zillman’s latest LinkSeries Publication is a 340 page digital guide of a selected comprehensive alphabetical listing of the latest and greatest resources and sites covering all areas of research that is currently available over the Internet. The guide covers online research resources and tools for the Newbie to research as well as the Seasoned researcher. Contents include: a) Research Resources, b) Research Tools, c) Student Research Resources Toolkit, d) Knowledge Discovery/Management and Data Mining Resources, e) Knowledge Discovery/Retrieval and the World Wide Web Resources, f) Business Intelligence Resources, g) Reference Resources, and h) Subject Tracer™ Information Blogs.
The Survivor’s Manual for The New Economy.
Marcus P. Zillman’s latest LinkSeries Publication is a 239 page digital read that gives excellent resources and annotated sources for the new economy analytics, alerts, ecommerce, financial sources, invisible and deep web resources, social and business networking sources along with new economy competitive and business intelligence resources and an extremely comprehensive listing of new economy online tools.