

# Resources for the PhD Thesis

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## 1 Publications search engines

### 1.1 Authors

#### 1.1.1 Microsoft Academics

[Microsoft Academics](#) is very useful when you want to search by terms, and it also helps you to find the most important authors in your topic. It has a very powerful semantic search engine.

#### 1.1.2 Semantic Scholar

[Semantic Scholar](#) is a powerful tool to know how authors are related among them, and to know relevant authors in a specific topic.

### **1.1.3 dblp**

[dblp](#) provides open bibliographic information on major computer science journals and proceedings. Originally, created at the University of Trier in 1993, dblp is now operated and further developed by [Schloss Dagstuhl](#). It gives you the majority of the publication of the authors. It is useful to get a general idea of what topics each author is researching. You can also search publications or topics.

## **1.2 Papers**

### **1.2.1 Google Scholar**

### **1.2.2 IEEE Xplore**

[IEEE Xplore](#)

### **1.2.3 Scopus**

### **1.2.4 Engineering Village**

[Engineering Village](#)

### **1.2.5 Elsevier**

[Elsevier](#)

### **1.2.6 Web Of Science**

### **1.2.7 Science Direct**

[Science Direct](#)

### **1.2.8 ACM Digital Library**

[ACM Digital Library](#)

### **1.2.9 Springer Link**

[Springer Link](#)

### **1.2.10 Wiley**

[Wiley](#)

### **1.2.11 arXiv**

[arXiv](#) is related to basic science, but interesting papers can be found here too. Sometimes, authors upload papers here when they need them, so they can cite them in other publications.

### 1.2.12 SCI-HUB

[SCI-HUB](#) is a database where you can access to a ridiculous huge amount of documentation (illegally) for free. You can search by title, URL, ISBN, DOI... just try if it works. Note that this **MUST** be your **LAST OPTION** when you are trying to find documentation online. Use it when there is no other choice, not because it is easier and more comfortable. Take care of yourself if you are going to use this: use a proxy, the Tor browser (I will not give you more ideas).

## 1.3 Conferences

### 1.3.1 WikiCFP

[Wiki Call For Papers](#) is a semantic wiki for Calls For Papers in science and technology fields. There are about 50,000 CFPs on WikiCFP. Here, you can search by terms, and the Wiki will return the conferences related to that topic, and the deadline for the papers submission.

### 1.3.2 Conference Monkey

[Conference Monkey](#) helps researchers and scientists to find, prepare and attend the best conferences and workshops in the greatest locations all around the world.

### 1.3.3 Conference Alerts

[Conference Alerts](#) is another web with a database with conferences.

## 1.4 Books

### 1.4.1 Google Books

[Google Books](#), as they say, is the world's most comprehensive index of full-text books. Sometimes, there are previews available of the book you are looking for. If you are lucky enough, the preview will include the chapters or pages (or paragraphs) that you want to read.

### 1.4.2 Library Genesis

[Library Genesis](#), also known as [LibGen](#), is a web page where you can find and download books for free from a wide catalogue. Note that this **MUST** be your **LAST OPTION** when you are trying to find any book online. Use it when there is no other choice, not because it is easier and more comfortable. Take care of yourself if you are going to use this: use a proxy, the Tor browser (I will not give you more ideas).

## 1.5 Slides

### 1.5.1 SlideShare

[SlideShare](#) is a web from the LinkedIn family where you can upload and search slides of a wide variety of topics.

## 1.6 Topics

### 1.6.1 Google Trends

[Google Trends](#) let you explore what is being searched on the Internet. You can search by search topics or terms and it will show you its popularity during time.

## 2 Quality of a publication

### 2.1 Papers

The impact index measures the impact that a journal has had on the scientific literature by analysing the citations that the articles published in it have received. It provides a relationship between the number of articles published in a given period and the number of citations received in that period.

It doesn't matter which one you use. The only rule here is to choose always the highest quartile available for a journal. Always keep that in mind.

#### 2.1.1 JCR

[JCR](#) (Journal Citation Report). High impact journals are officially indexed on the Web of Science (WoS) and included in the JCR. It's the official source of information today. The access to this platform is usually granted by the university using the corresponding credentials.

#### 2.1.2 SJR

[SJR](#) (Scimago Journal Rank). It also offers information on the impact of magazines, and country performance, evaluating the information extracted from Elsevier's Scopus. It's free.

### 2.2 Conferences

#### 2.2.1 GII-GRIN-SCIE

[GII-GRIN-SCIE](#) is usually the reference search engine to know the quality of a conference. It is better to search by acronym when possible. This is an initiative sponsored by GII (Group of Italian Professors of Computer Engineering), GRIN (Group of Italian Professors of Computer Science), and SCIE (Spanish Computer-Science Society).

#### 2.2.2 Conference Ranks

[Conference Ranks](#) is another web where you can lookup the ranking of a conference using the ERA Ranking (2010), the Qualis Ranking (2012) and the MSAR (2014).

#### 2.2.3 Core Conference Portal

[Core Journal Portal](#) uses CORE and ERA rankings.

## 3 $\text{\LaTeX}$ Tools

### 3.1 Editors

#### 3.1.1 Overleaf

### 3.2 Maths

#### 3.2.1 Detexify

[Detexify](#) is an online tool that helps you to know how to write any symbol in  $\text{\LaTeX}$ , using an draw-based search.

#### 3.2.2 LaTeX Equation Editor

[LaTeX Equation Editor](#) is an online equation editor that shows a really friendly user interface. Using the option in the toolbar, you can write any mathematical expression in a very easy way, and it will generate the  $\text{\LaTeX}$ code for you, so you don't have to think.

#### 3.2.3 HostMath Editor

[HostMath - Online  \$\text{\LaTeX}\$ Formula Editor](#) is another online equation editor that works in the same way as the previous one. The user interface let you introduce any mathematical expression, and it will generate the  $\text{\LaTeX}$ code for you.

#### 3.2.4 Mathpix Snip

[Mathpix Snip](#) is a tool that extract  $\text{\LaTeX}$ from PDFs or handwritten notes in seconds just by taking a screenshot. To use it, you must download it and install it in you PC. It seems to have a limited number of uses, before the program asks you to upgrade.

### 3.3 Tables

#### 3.3.1 Table Generator

[Table Generator](#) is an online tool that helps you create tables in  $\text{\LaTeX}$ . It offers an intuitive interface, and generates the code in  $\text{\LaTeX}$ . It can be useful to create the framework of your table, as a first sketch.

### 3.4 Grammar and Spelling

#### 3.4.1 TeXtidote

[TeXtidote](#) is a correction tool for LaTeX documents.

### 3.5 Templates

#### 3.5.1 Showcase of beautiful typography

[Showcase of Beautiful Typography](#) is a collection of beautiful examples of documents available online in TeX format. Sometimes, the  $\text{\LaTeX}$ code is also available.



### 3.5.2 TeXample

[TeXample](#) is a web site dedicated to the wonderful world of figures and images in TeX and friends.

## 4 Orthography, grammar and translators

### 4.1 Grammar and Spell Checker

#### 4.1.1 Grammarly

[Grammarly](#) is a web browser extension that helps you to compose clear, mistake-free writing.

### 4.2 Translators

#### 4.2.1 DeepL

[DeepL](#) is the quintessential translator. It offers a small list of languages, but the result of the translations are near perfection. You can write like a native using this. It is also useful to check your own texts. It works using deep learning, so the more text you type to translate, the more accurate the result will be.

#### 4.2.2 Itzuli - Itzultzaile Neuronal

[Itzuli](#) is the best known online basque language translator. It is offered by the basque government.

### 4.3 Writing papers

#### 4.3.1 Academic Phrasebank

[Academic Phrasebank](#) is a general resource for academic writers. It aims to provide examples of some of the phraseological ‘nuts and bolts’ of writing organised according to the main sections of a research paper or dissertation (see the top menu ). The phrases, and the headings under which they are listed, can be used simply to assist you in thinking about the content and organisation of your own writing, or the phrases can be incorporated into your writing where this is appropriate.

## 5 Reference manager

### 5.1 Online

You can access to your documentations and all your bibliography from anywhere, just having an account.

#### 5.1.1 Mendeley

[Mendeley](#) is a free reference manager and academic social network that can help you organise your research, collaborate with others online, and discover the latest research. It automatically generate bibliographies (in various formats), you can easily import papers from other research software and find relevant papers based on what you’re reading and access your papers from anywhere online. There is a web browser extension available as well as a desktop app.

### 5.1.2 Zotero

[Zotero](#) is a free, easy-to-use tool to help you collect, organise, cite, and share research. It is very useful when you want to reference a web page (a blog, a YouTube video, a corporative web, etc.). It is available as a web browser extension and as a desktop app.

## 5.2 Local

All the documentations and the bibliography is locally stored.

### 5.2.1 JabRef

[JabRef](#) is an open source bibliography reference manager. It is a desktop application. If, for any reason, you want to share part of your bibliography, you can use Dropbox, OneDrive (or any other option) to bypass the local storage.

## 6 Social Networks

### 6.1 LinkedIn

### 6.2 ORCID

[ORCID](#) ORCID is a nonprofit organisation helping create a world in which all who participate in research, scholarship and innovation are uniquely identified and connected to their contributions and affiliations, across disciplines, borders, and time. It is really important to have an ORCID number as a researcher, so you can be uniquely identified. This is a example of a [superb profile](#) in ORCID.

### 6.3 Twitter

### 6.4 Google Scholar Account

### 6.5 Academia

[Academia](#) is a platform for academics to share research papers. Academics use Academia.edu to share their research, monitor deep analytics around the impact of their research, and track the research of academics they follow.

## 7 Technology Forecasting

### 7.1 Blogs

#### 7.1.1 Wired

[Wired](#)

#### 7.1.2 Visual Studio Magazine

[Visual Studio Magazine](#)

#### 7.1.3 Electronics Hub

[Electronics Hub](#)

#### **7.1.4 Schneier on Security**

[Schneier on Security](#)

#### **7.1.5 Hackaday**

[Hackaday](#)

#### **7.1.6 Hacker Noon**

[Hacker Noon](#)

#### **7.1.7 Ars Technica**

[Ars Technica](#)

#### **7.1.8 Core 77**

[Core 77](#)

#### **7.1.9 The Hacker News**

[The Hacker News](#)

### **7.2 Content Curation**

#### **7.2.1 paper.li**

[paper.li](#) is a content curation tool that enables individuals to create “newspapers” based on topics they choose and “Automatically find, publish and promote engaging articles, photos and videos from across the web.” It automatically includes video clips, photos, stories and categorises them into the topics you choose. You can also add #hashtags that you want it to track, Twitter lists of other pages, blog feeds, trending hashtags and you can include anything you can find online and add it using a bookmarklet. You can select general topics that you want to include and deselect those that you do not.

#### **7.2.2 Feedly**

[Feedly](#) is a robust feed reader that aggregates information from around the web into one convenient place. You can use it to view updates on any topic you’re interested in, whether they come from the news, blogs, social media posts, RSS feeds, or other sources. You get to see all of this information in one single place rather than having to visit each website, blog, etc., to get updates. You can use Feedly from your computer, the web, or your mobile device.

#### **7.2.3 Scoop.it**

[Scoop.it](#) is part content curation tool, part social network. It allows you to create boards of curated content based on topics you choose, share your thoughts on that content, and connect with others who have similar interests.

#### **7.2.4 Diigo**

[Diigo](#) is a multi-tool for personal knowledge management dramatically improve your workflow and productivity easy and intuitive, yet versatile and powerful.

### 7.2.5 Pocket

[Pocket](#) helps people save interesting articles, videos and more from the web for later enjoyment. Once saved to Pocket, the list of content is visible on any device — phone, tablet or computer. It can be viewed while waiting in line, on the couch, during commutes or travel — even offline.

## 8 Project Management Tools

### 8.1 Time Management

#### 8.1.1 Pomodoro Timer

[Pomodoro Timer](#) is a customizable and easy to use looping pomodoro timer to boost your efficiency. Pomodoro Technique is a time management method developed by Francesco Cirillo in the late 1980s. This technique use a timer to break down works into a set of intervals separated by breaks. Pomodoro technique increases productivity by taking short scheduled breaks regularly.

#### 8.1.2 Pomello

[Pomello](#) is a minimalist desktop app that turns your Trello cards into Pomodoro tasks. This little timer is packed with features to supercharge your productivity for your daily tasks or life-changing dreams.

#### 8.1.3 Google Calendar

[Google Calendar](#)

### 8.2 Tasks Management

#### 8.2.1 Trello

[Trello](#) is a visual tool that helps you organise your tasks, creating cards.

#### 8.2.2 KanbanFlow

[KanbanFlow](#) is a similar tool to Trello, but the columns in the Kanban method are predefined.

#### 8.2.3 Notion

[Notion](#) is a all-in-one workspace that can be synchronised with the previous tools. It's free for personal use. The main drawback is that even the desktop version need Internet to work.

## 9 Images

### 9.1 CC Search

[CC Search](#)

### 9.2 Pinterest

[Pinterest](#)

### 9.3 Unplash

[Unplash](#) is a source of freely usable images.

### 9.4 Old Book Illustrations

[Old Book Illustration](#) Old Book Illustrations was born of the desire to share illustrations from a modest collection of books, which they set out to scan and publish. There won't be on this site illustrations first published prior to the 18th century or later than the first quarter of the 20th century.

### 9.5 Flaticon

[Flaticon](#) is the largest database of free icons available in PNG, SVG, EPS, PSD and BASE 64 formats.

### 9.6 Draw.io

[Draw.io](#) is a free online diagram software for making flowcharts, process diagrams, org charts, UML, ER and network diagrams.

### 9.7 Web Sequence Diagrams

[Web Sequence Diagrams](#) is an online tool to create sequence diagrams in seconds.

## 10 Web Browser Utilities

### 10.1 Extensions

#### 10.1.1 Grammarly

[Grammarly](#) is a web browser extension that helps you to compose clear, mistake-free writing.

#### 10.1.2 Google RSS

[RSS Subscription Extension \(by Google\)](#) adds one-click subscription to your toolbar. This extension auto-detects RSS feeds on the page you are reading and upon finding one will display an RSS icon in the Omnibox, allowing you to click on it to preview the feed content and subscribe.

#### 10.1.3 Ghostery

[Ghostery](#) is a powerful privacy extension. Block ads, stop trackers and speed up websites.

#### 10.1.4 EditThisCookie

[EditThisCookie](#) is the only cookie editor you will ever need.

#### 10.1.5 LanguageTool Plus

[LanguageTool Plus](#) automatically checks the text you enter in text fields. You can also check any text when selecting it, and it work with a lot of languages.

### 10.1.6 Markdown Here

[Markdown Here](#) will help you to write email more quickly and powerfully than you thought possible. With no extra effort on your part, Markdown Here eliminates all the hassle of formatting email.

### 10.1.7 Auto Tab Discard

[Auto Tab Discard](#) automatically discards inactive tabs after a defined time period to free up memory usage of the tab and to prevent background scripts from using the computational power of your browser when the tab is not being used by the user. This extension uses the native method to discard tabs and hence does not have issues the other similar extensions might suffer from. Also in this method, the discarded tabs will not use any memory at all and will restore to the previous state while preserving page state (like scroll position for instance).

### 10.1.8 Pop Up Blocker

[Pop Up Blocker](#) automatically removes all ad pop ups, pop unders, and overlays for a cleaner browsing experience.

### 10.1.9 AdBlock

[AdBlock](#) blocks ads and pop-ups on YouTube, Facebook, Twitch, and your favourite websites.

### 10.1.10 Keepa

[Keepa](#) is an Amazon price tracker.

## 10.2 Search Engines

Google is not the only search engine available.

### 10.2.1 DuckDuckGo

[DuckDuckGo](#) is an internet search engine that emphasizes protecting searchers' privacy and avoiding the filter bubble of personalised search results. DuckDuckGo distinguishes itself from other search engines by not profiling its users and by showing all users the same search results for a given search term.

### 10.2.2 Startpage

[Startpage](#) is "the world's most private search engine", which doesn't log, track or share your personal data. Over the years they added many additional privacy features, like " Anonymous View " for further protection.

### 10.2.3 Dogpile

[Dogpile](#) returns all the best results from leading search engines including Google and Yahoo!, so you find what you're looking for faster. Each search engine has its own method of searching and each will return different results. Dogpile looks at all of them, decides which are most relevant to your search, eliminates duplicates and reveals them to you. In the end, you get a list of results more complete than anywhere else on the Web.

#### 10.2.4 Kompass

[Kompass](#) is a searcher of companies in more than 65 countries.

## 11 Data Visualisation

### 11.1 Books

#### 11.1.1 Colin Ware - Visual Thinking for Design

#### 11.1.2 Edward R. Tufte - The visual display of Quantitative Information

#### 11.1.3 Tamara Munzner - Visualization Analysis and Design

### 11.2 IDEs and Libraries

#### 11.2.1 D3.js - JavaScript Library

[D3.js](#) is a JavaScript library for manipulating documents based on data. D3 helps you bring data to life using HTML, SVG, and CSS. D3's emphasis on web standards gives you the full capabilities of modern browsers without tying yourself to a proprietary framework, combining powerful visualization components and a data-driven approach to DOM manipulation.

#### 11.2.2 dc.js - Dimensional Charting Javascript Library

[dc.js](#) is a javascript charting library with native crossfilter support, allowing highly efficient exploration on large multi-dimensional datasets. It leverages d3 to render charts in CSS-friendly SVG format. Charts rendered using dc.js are data driven and reactive and therefore provide instant feedback to user interaction.

#### 11.2.3 Crossfilter - JavaScript Library

[Crossfilter](#) is a JavaScript library for exploring large multivariate datasets in the browser. Crossfilter supports extremely fast (~30ms) interaction with coordinated views, even with datasets containing a million or more records.

#### 11.2.4 Observable

[Observable](#) is the magic notebook for exploring data and thinking with code.

#### 11.2.5 Anaconda

[Anaconda | Individual Edition](#) is your data science toolkit. With over 20 million users worldwide, the open-source Individual Edition (Distribution) is the easiest way to perform Python/R data science and machine learning on a single machine. Developed for solo practitioners, it is the toolkit that equips you to work with thousands of open-source packages and libraries.

### 11.3 Online Tools

#### 11.3.1 Adobe Color

[Adobe Color](#) is an online tool that helps you to choose the right set of colour for any visualisation that you have to develop.

### 11.3.2 OpenStreetMap

[OpenStreetMap](#) is a map of the world that is free to use under an open licence.

### 11.3.3 City Roads

[City Roads](#) renders every single road within a city.

### 11.3.4 Scrollytelling

[How To Implement Scrollytelling](#) by Russell Goldenberg.

## 12 3D Printing

### 12.1 NASA 3D Resources

[NASA 3D Resources](#) is a growing collection of 3D models, textures, and images from inside NASA. All of these resources are free to download and use. They also have made available a [GitHub Repository](#).

### 12.2 Smithsonian Open Access

[Smithsonian Open Access](#) is a place where you can download, share, and reuse millions of the Smithsonian’s images—right now, without asking. With new platforms and tools, you have easier access to 2D and 3D digital items from their collections. This includes images and data from across the Smithsonian’s 19 museums, nine research centres, libraries, archives, and the National Zoo. The [Smithsonian 3D Digitalization](#) is also available.

### 12.3 Thingiverse

[Thingiverse](#) is the most well-known 3D models database.

## 13 Other Tools

### 13.1 Online Tools

#### 13.1.1 WolframAlpha

[WolframAlpha](#) is a computational knowledge engine or answer engine. It is an online service that answers factual queries directly by computing the answer from externally sourced “curated data”, rather than providing a list of documents or web pages that might contain the answer, as a search engine might.

#### 13.1.2 OS Boxes

[OS Boxes](#) provides ready to use Unix/Linux virtual machines, so anyone can easily download and use it regardless of host OS.

#### 13.1.3 I Love PDF

[I Love PDF](#) offers every tool you need to work with PDFs in one place. You can merge, split, compress, convert, rotate, unlock and watermark PDFs with just a few clicks.



#### 13.1.4 JetBrains Mono Typeface

[JetBrains Mono](#) is a typeface designed for programmers. It is highly recommended. Some of its features are that symbols as “L”, “I”, and “1”, are clearly distinguishable from each other, and has a lot of ligatures to show operator, reducing noise and balancing white spaces.

#### 13.1.5 StackEdit

[StackEdit](#) is a markdown online editor.

#### 13.1.6 Text to ASCII Art Generator

[Text to ASCII](#) is an online tool that generates ASCII images with the letters you type. It is really useful for commenting code and make it clean and neat.

#### 13.1.7 Plain Text Table Generator

[Plain Text Table Generator](#) is a tools that does exactly that. It generates tables in ASCII. It is really useful for commenting code and make it clean and neat.

#### 13.1.8 IFTTT

[IFTTT](#) is the free way to do more with hundreds of the apps and devices you love, including Twitter, Dropbox, Evernote, Nest, Fitbit, Amazon Alexa, and Google Assistant.

#### 13.1.9 Online Mind Mapping

[Online Mind Mapping](#)

#### 13.1.10 Evernote

[Evernote](#) Your notes. Organized. Effortless. Take notes anywhere. Find information faster. Share ideas with anyone. Meeting notes, web pages, projects, to-do lists—with Evernote as your note taking app.

#### 13.1.11 Mercury

[Mercury](#) transforms web pages into clean text. Publishers and programmers use it to make the web make sense, and readers use it to read any web article comfortably.

#### 13.1.12 Bit Twiddling Hacks

[Bit Twiddling Hacks](#)

#### 13.1.13 The Silicon Zoo

[The Silicon Zoo](#) is a collection of logic cells found in silicon chips. The collection is provided freely for the study, comparison, and reverse-engineering of silicon implementations.

### 13.2 Local Tools

#### 13.2.1 Sublime Text

[Sublime Text](#) is a sophisticated text editor for code, markup and prose. This is THE editor.

### **13.2.2 Pi-hole**

[Pi Hole](#) is a DNS sinkhole that protects your devices from unwanted content, without installing any client-side software.

### **13.2.3 GNU Emacs**

[GNU Emacs](#) is an extensible, customizable, free/libre text editor

### **13.2.4 HP Prime Emulator**

[HP Prime Emulator](#) is a PC program which copies the user interface, display and the keyboard of the HP Prime onto the PC. The emulator owns the same functionality as the HP Prime.