

## TL;DR

You need Python 3+ and *one* dependency (PyAudio) to run A→Z+T. Download this repository, and run `main.py`.

## Python

If you need to install Python, you can find it here.

Note: your python 3+ executable may be called `python` or `python3`. Be sure to use the correct form for your system when following the instructions below.

## Dependencies

- PyAudio: run `python -m pip install pyaudio` to install.
  - On Linux (and Mac?), `pyaudio` may in turn have a dependency of `portaudio19-dev`, which you should install with your package manager (e.g., `sudo apt-get install portaudio19-dev`).

## Installation on Microsoft Windows

For some reason, I have had trouble getting `pyaudio` installed on Windows machines with most recent versions of Python (3.9). You may have better mileage than I. In any case, I have found that it works smoothly to

- Download and install Python 3.6.8 (e.g., from here).
  - **Be sure to check “add to PATH”** (or whatever options are appropriate), so Windows knows where Python is installed.
  - If you have more than one version of python installed (e.g. 2.7 and 3.6.8), be sure to know how to run version 3 for this program.
- To install the `pyaudio` dependency, open a terminal (e.g., `win+R` then type ‘cmd’) and run
  - `python -m pip install pyaudio`

## XLingPaper and the XMLmind XML Editor (XXE)

To make full use of A→Z+T’s report output, I strongly advise you to be ready to use XLingPaper, if you are not already. It can be downloaded here; this page also includes information on downloading the XMLmind XML Editor (XXE), which is critical to most uses of XLingPaper.

## **$A \rightarrow Z + T$**

To get the program:

- `git clone https://github.com/kent-rasmussen/azt.git`
  - You may need to install Git (e.g. [here](#) or [here](#)) first, or
- click on the green code button on the main page for download options.

If you download an archive (e.g., zip file), extract it so you have a folder of files. Either way, put it somewhere sensible, so you can find it later. If you use `git clone`, you can update in the future with `git pull`, and just download the changes since you last updated.

To run: Assuming your system is configured correctly, just run `main.py`. Depending on your system, that may be just a click on the file (or a link to it on your desktop or wherever), or you may need to type that into a terminal. Your operating system should know to open `main.py` with `python`, but you can also explicitly tell it to with `python main.py`.

For usage information, see `USAGE.md`