

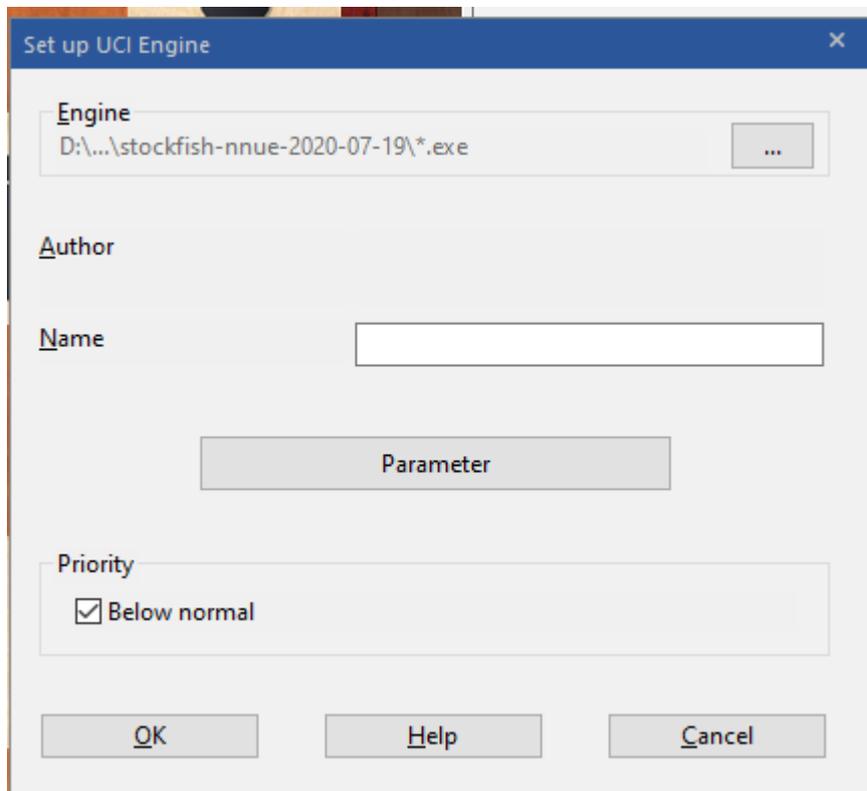
## Setting up Stockfish NNEU in Fritz/Chessbase

- 1) Go to <https://github.com/nodchip/Stockfish/releases> and download the latest copy – about 11mb in size and with a lot of different versions included
- 2) Confirm what your CPU can handle – use CPU Z if unsure about which one you have.
- 3) Go to <https://discord.com/channels/435943710472011776/733547343319924808> and download the network of choice
- 4) Unzip the download from (1) in a folder of your choice
- 5) Add a subfolder to that directory called eval
- 6) Unzip or place the file nn.bin into the eval directory
- 7) From Step 2 determine which version of the engine you need. For modern Ryzen machines avx2

filename	CPU instructions	Supported CPUs
sse2	Intel Streaming SIMD Extensions 2	>= AMD Athlon 64
sse3	Intel Streaming SIMD Extensions 3	>= Intel Pentium 4 (Prescott model F)
sse3-popcnt	Intel Streaming SIMD Extensions 3 + POPCNT	>= AMD Phenom
ssse3	Intel Supplemental Streaming SIMD Extensions 3	>= Intel Core 2 Duo (Merom)
sse41	Intel Streaming SIMD Extensions 4.1	>= Intel Core 2 Duo (Penryn)
sse42	Intel Streaming SIMD Extensions 4.2	>= Intel Core i7 (Bloomfield), AMD FX (Bulldozer)
avx2	Intel Advanced Vector Extensions 2	>= AMD APU (Carrizo)
bmi2	Intel Advanced Vector Extensions 2 + BMI2	>= Intel Core i7 (Haswell)

filename	CPU instructions	Supported CPUs
avx512	Intel Advanced Vector Extensions 512	> = Intel Core i9/i7 (Skylake-X)

- 8) Go into Fritz or Chessbase and "Create UCI Engine"
- 9) Click on the three dots and navigate to the folder you created in (4)



- 10) Select the file – you want the section after stockfish to be the correct one you identified in (7). So in my case a avx2. You then want the file with .profile in the name. This should have reduced the list to two choices – either a 256 or 384 file. You need the correct one to match the network. At this point select the 256

Name	Date modified	Type	Size
eval	21/07/2020 11:59	File folder	
stockfish.avx2.halfkp_256x2-32-32.nnue-learn.2020-07-19	19/07/2020 08:22	Application	17,736 KB
stockfish.avx2.halfkp_256x2-32-32.profile-nnue.2020-07-19	19/07/2020 08:21	Application	1,206 KB
stockfish.avx2.halfkp_384x2-32-32.nnue-learn.2020-07-19	19/07/2020 08:24	Application	17,729 KB
stockfish.avx2.halfkp_384x2-32-32.profile-nnue.2020-07-19	19/07/2020 08:23	Application	1,202 KB
stockfish.avx2.no-nnue.nnue-gen-sfen-from-original-eval.2020-07-19	19/07/2020 08:24	Application	1,598 KB
stockfish.avx512.halfkp_256x2-32-32.nnue.2020-07-19	19/07/2020 13:31	Application	1,309 KB
stockfish.avx512.halfkp_256x2-32-32.nnue-learn.2020-07-19	19/07/2020 13:32	Application	17,744 KB
stockfish.avx512.halfkp_384x2-32-32.nnue.2020-07-19	19/07/2020 13:32	Application	1,308 KB
stockfish.avx512.halfkp_384x2-32-32.nnue-learn.2020-07-19	19/07/2020 13:33	Application	17,740 KB
stockfish.avx512.no-nnue.nnue-gen-sfen-from-original-eval.2020-07-19	19/07/2020 13:34	Application	1,603 KB
stockfish.bmi2.halfkp_256x2-32-32.nnue-learn.2020-07-19	19/07/2020 08:26	Application	17,735 KB
stockfish.bmi2.halfkp_256x2-32-32.profile-nnue.2020-07-19	19/07/2020 08:25	Application	1,205 KB
stockfish.bmi2.halfkp_384x2-32-32.nnue-learn.2020-07-19	19/07/2020 08:28	Application	17,728 KB
stockfish.bmi2.halfkp_384x2-32-32.profile-nnue.2020-07-19	19/07/2020 08:27	Application	1,201 KB
stockfish.bmi2.no-nnue.nnue-gen-sfen-from-original-eval.2020-07-19	19/07/2020 08:28	Application	1,598 KB
stockfish.sse2.halfkp_256x2-32-32.nnue-learn.2020-07-19	19/07/2020 07:57	Application	17,730 KB
stockfish.sse2.halfkp_256x2-32-32.profile-nnue.2020-07-19	19/07/2020 07:57	Application	1,197 KB
stockfish.sse2.halfkp_384x2-32-32.nnue-learn.2020-07-19	19/07/2020 07:59	Application	17,730 KB
stockfish.sse2.halfkp_384x2-32-32.profile-nnue.2020-07-19	19/07/2020 07:58	Application	1,196 KB
stockfish.sse2.no-nnue.nnue-gen-sfen-from-original-eval.2020-07-19	19/07/2020 08:00	Application	1,605 KB
stockfish.sse3.halfkp_256x2-32-32.nnue-learn.2020-07-19	19/07/2020 08:01	Application	17,729 KB
stockfish.sse3.halfkp_256x2-32-32.profile-nnue.2020-07-19	19/07/2020 08:01	Application	1,204 KB
stockfish.sse3.halfkp_384x2-32-32.nnue-learn.2020-07-19	19/07/2020 08:03	Application	17,729 KB
stockfish.sse3.halfkp_384x2-32-32.profile-nnue.2020-07-19	19/07/2020 08:02	Application	1,202 KB
stockfish.sse3.no-nnue.nnue-gen-sfen-from-original-eval.2020-07-19	19/07/2020 08:04	Application	1,605 KB
stockfish.sse3-popcnt.halfkp_256x2-32-32.nnue-learn.2020-07-19	19/07/2020 08:05	Application	17,725 KB
stockfish.sse3-popcnt.halfkp_256x2-32-32.profile-nnue.2020-07-19	19/07/2020 08:05	Application	1,201 KB
stockfish.sse3-popcnt.halfkp_384x2-32-32.nnue-learn.2020-07-19	19/07/2020 08:07	Application	17,724 KB
stockfish.sse3-popcnt.halfkp_384x2-32-32.profile-nnue.2020-07-19	19/07/2020 08:06	Application	1,199 KB
stockfish.sse3-popcnt.no-nnue.nnue-gen-sfen-from-original-eval.2020-07-19	19/07/2020 08:08	Application	1,595 KB

11) The engine will now populate the details

Set up UCI Engine

**Engine**  
D:\Chess Resources\StockFiNN01\stockfinn.exe

**Author**  
T. Romstad, M. Costalba, J. Kiiski, G. Linscott

**Name**  
Stockfish 280620 64 POPCNT

**Parameter**

**Priority**  
 Below normal

OK Help Cancel

12) Click OK

- 13) The engine should now be installed
- 14) Click Add kibitzer to check the engine – it should be running at a decent rate
  - a. If get zero evals you don't have a network!
  - b. If it wont run at all its probably the wrong version for your machine
- 15) Parameter Setting: Click on the Engine/ Advanced and Parameter
- 16) Hash – half of your total ram should be max, generally a little less
- 17) Contempt – set to zero
- 18) Analysis Contempt – Off
- 19) 50 Move rule off – ICCF don't use it as of a couple of years ago
- 20) Threads – set to your total minus a couple if you want to concentrate on chess analysis
- 21) Latest versions have Eval File, older ones Eval Folder – if you want to switch nets this is the place to do it.

#### Notes of Caution

- 1) Generally, NNUE nets are built on quite shallow evaluations and testing have been in very rapid games – its benefits are unknown in deep search. Cross check with vanilla SF any interesting moves it makes
- 2) The net needs to be kept up to date.
- 3) If you go wrong installing to remove the engine you need to go to your Users/Logonname/app folder/Roaming/Chessbase/Engines.UCI and delete the offending File before trying again
- 4)