

### Installation Tutorial

The usage of OpenFoam 8® requires the following software. On the right side all commands and steps are listed in detail. The basic steps are:

1. UBUNTU 20.04
2. FFMEPG
3. OpenFoam8

On <https://engineerdo.com> you can find a video tutorial for the installation.

If you have problems during the installation or you wish to get the installation done by us, please get in touch with us:  
[info@engineerdo.com](mailto:info@engineerdo.com)

#### Hint:

It can be useful to install VLC additionally to be able to play nearly every codec of videos.

```
sudo snap install vlc
```

#### UBUNTU

Download Ubuntu 20.04 and install on USB Stick  
Go to Bios → boot from usb  
Install Ubuntu from stick

```
sudo apt-get update
```

```
sudo apt-get upgrade
```

#### FFMEPG

```
sudo apt-get install ffmpeg
```

#### OpenFoam8

```
sudo sh -c "wget -O - https://dl.openfoam.org/gpg.key | apt-key add -"
```

```
sudo add-apt-repository http://dl.openfoam.org/ubuntu
```

```
sudo apt-get update
```

```
sudo apt-get -y install openfoam8
```

```
sudo gedit ~/.bashrc
```

```
source /opt/openfoam8/etc/bashrc
```

#### First Simulation

```
cd ~
```

```
mkdir engineerdo
```

```
cd ~/engineerdo
```

```
wget https://bit.ly/2H0xHAN
```

```
unzip 2H0xHAN.zip
```

```
cd Venturi
```

```
blockMesh
```

```
snappyHexMesh -overwrite
```

```
checkMesh
```

```
decomposePar
```

```
mpirun -np 2 pimpleFoam -parallel
```

```
paraview
```