

# audio

Srini

2023-08-20

```
export soundfile=../../etc/water_flow.wav
../../bin/audio $soundfile
../../bin/freqd ${soundfile}.csv 0.5

## libsndfile-1.2.0
## ../../etc/water_flow.wav.csv

library(ggplot2)
library(dplyr)

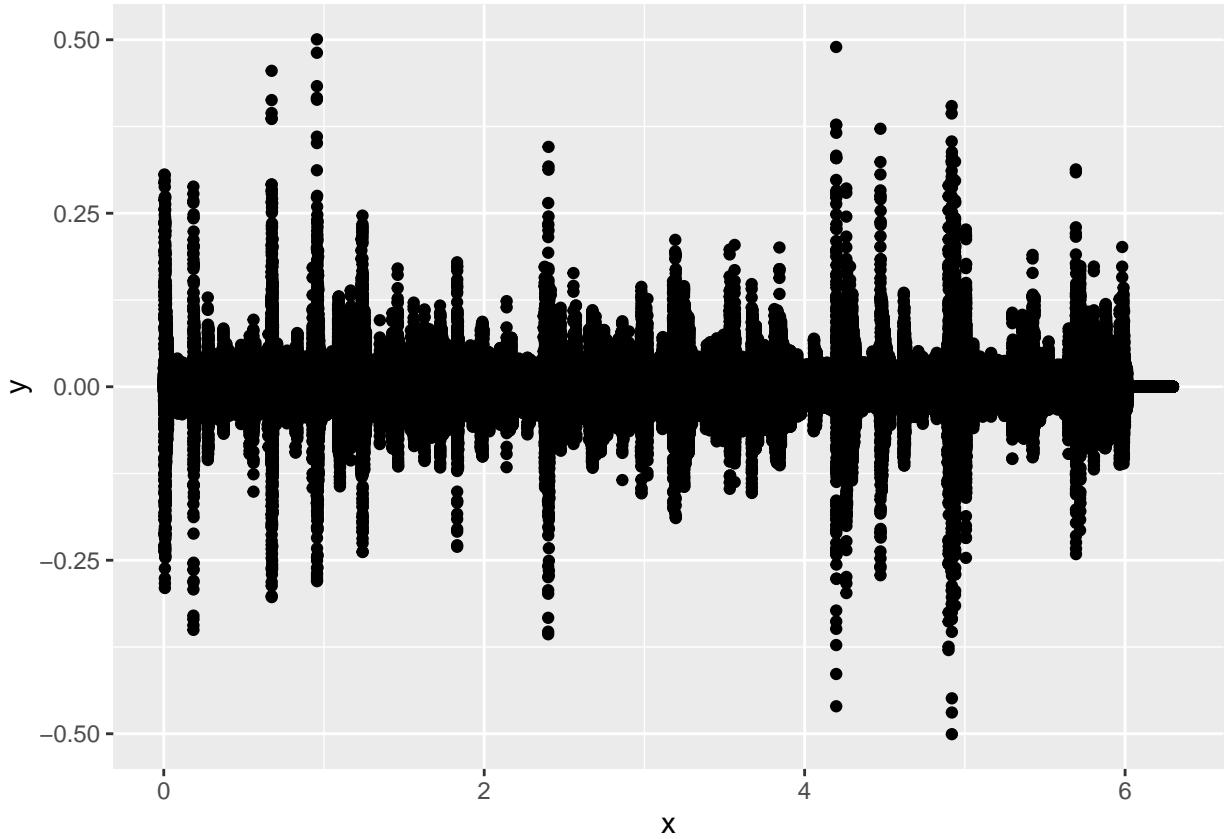
##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##       filter, lag

## The following objects are masked from 'package:base':
##       intersect, setdiff, setequal, union

#soundfile<-../../etc/water_flow.wav"
#soundfile2<-../etc/Cartoon-02.wav"

signal<-read.csv("../etc/water_flow.wav.csv",header=FALSE,sep=",")
names(signal)<-c("x","y")
ggplot(signal,aes(x=x,y=y))+geom_point()
```



## Spectrum

```
signalfft<-read.csv("../etc/water_flow.wav.csv.csv",header=FALSE,sep=",")  
names(signalfft)<-c("freq","rex","imx","mod","arg")  
dominant<-signalfft %>% slice_head(n=256)  
barplot(signalfft$mod,col="steelblue",names.arg=signalfft$freq,xlab="Frequency")
```

