

## 1. In Preferred Directory (e.g.: ~/DOI ), download software from:

### a) NSGA2 software:

In google type: kalyanmoy deb michigan (first link)

From menu on the left, access "Source codes":

Multi-objective NSGA-II code in C, Revision 1.1.6

### b) Hypervolume software:

In google type: fonseca hypervolume (first link)

Download version 1.3 -> source code

### c) Moodle platform of Current Course:

NSGA2 Computer Work - Source Code - Modifications (3 files: global.h, nsga2r.c, report.c)

## 2. Install and prepare software for execution:

### a) Uncompress both .tar.gz files with the command:

```
tar -xvzf archivo.tar.gz
```

### b) In hv directory, create executable file hv, and copy to nsga2 directory:

```
make
```

```
cp hv ../nsga2-gnuplot-v1.1.6
```

### c) copy modified subroutines in nsga2 directory, e.g.:

```
cp global.h nsga2-gnuplot-v1.1.6/global.h
```

```
cp nsga2r.c nsga2-gnuplot-v1.1.6/nsga2r.c
```

```
cp report.c nsga2-gnuplot-v1.1.6/report.c
```

### d) In nsga2 directory, create executable file nsga2r

```
make
```

*( If subroutine is changed, then required to create executable file again:*

*1) make clean, 2) make )*

### e) How to use software, read file: Readme ; .in files in directory input\_data

### f) How to modify fitness function: modify file problemdef.c