**Setup:**

WAP with 2.4GHz, 5GHz and 6GHz networks

2 computers with installed software (durin and aestream)

2 Durin robots

1 wireless keyboard

1 screen

**Setup Connection:**

Network SSIDs:

SSID Password

NCSworkshop2.4 NCSworkshop2.4

NCSworkshop5 NCSworkshop5

NCSworkshop6 NCSworkshop6

Computer users:

User: ncs Password: ncs (no root access)

Durin Robots:

User: ncs Password: ncs (no root access)

Durin connection instructions:

Connect to WAP through one of the wifis

Power up durin (see below)

Ssh to selected durin:

ssh ncs@durin#.local (durin0 or durin1 → shown in the sticker on top of the eth port)

**Durin hardware:**

ToF sensor x8

IMU

EBV sensor (640 x 480)

**Software:**

Python requirements:

pip install aestream

pip install durin (if the package is broken the install from [repo](https://github.com/ncskth/durin))

Stream events from durin:

python3 stream\_events.py (-i/--ip, -p/--port)

Receive data in computer (Example code):

if \_\_name\_\_ == "\_\_main\_\_":

with aestream.UDPInput((640, 480), device = 'cpu', port=args.port) as stream:

with Durin('durin0.local') as durin:

try:

while True:

frame = stream.read() # receive events as frame

(obs, \_, \_) = durin.read() # receive durin sensory data

durin(Move(y, x, r)) # ranges from -500 to 500

except Exception as e:

print(e)