if [[ “$(uname -a)" =~ ^.\*aarch64.\*$ ]]; then ISTX1=true else ISTX1=false fi

# Install Grinch Kernel if Tk1

if ! $ISTX1 then cd ~/; git clone https://github.com/jetsonhacks/installGrinch.git cd installGrinch; ./installGrinch.sh fi

# Configure time-zone

sudo dpkg-reconfigure tzdata

# Ros Prerequisites

sudo update-locale LANG=C LANGUAGE=C LC\_ALL=C LC\_MESSAGES=POSIX sudo sh -c ‘echo “deb http://packages.ros.org/ros/ubuntu trusty main” > /etc/apt/sources.list.d/ros-latest.list’ wget https://raw.githubusercontent.com/ros/rosdistro/master/ros.key -O - | sudo apt-key add - sudo apt-get update

# Ros Jade Base

sudo apt-get -y install ros-jade-ros-base

# Python Dependencies

sudo apt-get -y install python-rosdep python-dev python-pip python-rosinstall python-wstool

sudo rosdep init rosdep update echo “source /opt/ros/jade/setup.bash” >> ~/.bashrc source ~/.bashrc

# Ros packages

sudo apt-get -y install ros-jade-rosserial-arduino sudo apt-get -y install ros-jade-rosserial sudo apt-get -y install ros-jade-eigen-conversions sudo apt-get -y install ros-jade-tf2-geometry-msgs sudo apt-get -y install ros-jade-angles sudo apt-get -y install ros-jade-web-video-server sudo apt-get -y install ros-jade-rosbridge-suite sudo apt-get -y install ros-jade-rospy-tutorials sudo apt-get -y install ros-jade-joy sudo apt-get -y install ros-jade-teleop-twist-joy sudo apt-get -y install ros-jade-roslint sudo apt-get -y install ros-jade-controller-manager sudo apt-get -y install ros-jade-camera-calibration-parsers sudo apt-get -y install ros-jade-xacro sudo apt-get -y install ros-jade-robot-state-publisher sudo apt-get -y install ros-jade-diff-drive-controller sudo apt-get -y install ros-jade-usb-cam sudo apt-get -y install ros-jade-ros-control sudo apt-get -y install ros-jade-dynamic-reconfigure sudo apt-get -y install ros-jade-fake-localization sudo apt-get -y install ros-jade-joint-state-controller

# Configure Catkin Workspace

source /opt/ros/jade/setup.bash cd ~/catkin\_ws/src catkin\_init\_workspace

# Install Ros Opencv bindings from source

cd ~/catkin\_ws wstool init src wstool merge -t src src/rosjet/rosjet.rosinstall wstool update -t src

# Install Caffe (https://gist.github.com/jetsonhacks/acf63b993b44e1fb9528)

sudo add-apt-repository universe sudo apt-get update sudo apt-get install libprotobuf-dev protobuf-compiler gfortran  
libboost-dev cmake libleveldb-dev libsnappy-dev  
libboost-thread-dev libboost-system-dev  
libatlas-base-dev libhdf5-serial-dev libgflags-dev  
libgoogle-glog-dev liblmdb-dev -y sudo usermod -a -G video $USER cd ~/ git clone https://github.com/BVLC/caffe.git cd caffe && git checkout dev cp Makefile.config.example Makefile.config make -j 4 all

# System Optimizations

gsettings set org.gnome.settings-daemon.plugins.power button-power shutdown gsettings set org.gnome.desktop.screensaver lock-enabled false sudo apt-get -y install compizconfig-settings-manager gsettings set org.gnome.desktop.interface enable-animations false gsettings set com.canonical.Unity.Lenses remote-content-search none echo -e ‘[SeatDefaults]-user=ubuntu’ > login\_file; sudo mv login\_file /etc/lightdm/lightdm.conf gsettings set org.gnome.Vino enabled true gsettings set org.gnome.Vino disable-background true gsettings set org.gnome.Vino prompt-enabled false gsettings set org.gnome.Vino require-encryption false

echo “alias sr=‘source ~/catkin\_ws/devel/setup.bash’” >> ~/.bashrc

cd ~/catkin\_ws catkin\_make && source devel/setup.sh