Weekly Updates

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P.V.I.R 1/29/19

Parts Update

- Parts ordering will start on Tuesday 1/29/2019
- First order will consist of sensors and testing material
- We plan to submit the first order on 1/30 due to campus closure on 1/29
- Order Form is shown in next slide

Туре	Item	Part Number Qty		Unit Price	Manufacturer	
Sensor	Arduino Gas Sensor	MQ2	2	\$8.50	Grove	
Senor	Grove - Infrared Temperature Sensor	ed Temperature Sensor		\$12.50	Grove	
Sensor	GROVE - AIR QUALITY SENSOR V1.3		2	\$11.50	Grove	
Video	Makerfocus Raspberry Pi Camera Night Vision	1	\$25.99	Waveshare		
Testing	30 Pcs Double Sided PCB Board Prototype Kit	. 1	\$10.85	Paxcoo		
Testing	Jumper Wires Male to Male, Solderless Breadb	1	\$7.89	SIM&NAT		
Testing	Breadboard Solderless - 3 ct 400 Pin with 4 Por	1	\$7.99	Alleu		
Microcontroller	Arduino DUE		1	\$38.50	Arduino	

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and the second	Stephanie Cha	an	Professor:	Graber								
E-Mail:	schan40@gatech.edu Section#			ECE4012A								
Phone#:	678-972-0273		Group#:	sd19p06								
Date:	1/30/2019		91.000									
	Item	Supplier	Part#	Manufacturer#	Description	Qty	Price for 1					
Primary	1A	Arduino	C000147	MQ2	Grove - Gas Sensor	2	\$5.50					
Direct Link:	https://store.ardu	uino.cc/usa/grove-gas-sens	sor-mg2									
Alternative	1B	Digi-Key	1597-1297-ND	MQ2	G as Sensor	2	\$7.53					
Direct Link:	https://www.digikey.com/product-detail/en/seeed-technology-co.,-ltd/101020055/1597-1297-ND/5488126?WT.srch=1&gclid=Cj0KCQiA7briBRD7ARIsABhX&B74pDx9jm1J3rfoCWovs4pD0E											
	0.000	the second s										
Primary	2A	Seeedstudio	101020062	18 10 10	Grove - Infrared Temperature Sensor	2	\$9.90					
Direct Link:		edstudio.com/Grove-Infran		Sensor-p-1058.html		82						
Alternative	2B	Trossen Robotics	SS-SEN01041P		Grove - Infrared Temperature Sensor	2	\$9.90					
Direct Link: https://www.trossenrobotics.com/Grove-Infrared-Temperature-Sensor												
D :	3A	Constanting	101020078	V13	Occurs Als Occurs	2	60.00					
Primary Direct Link:		Seeedstudio edstudio.com/Grove-Air-qu			Grove - Air Quality Sensor	2	\$9.90					
Alternative	3B	Arduino	CO00138	V1.3	Grove - Air Quality Sensor	2	\$11.50					
Direct Link:		uino.cc/usa/grove-air-quali		V 1.5	Grove - Air Quality Sensor	2	\$11.50					
on ett tink.	https://store.alut	amo.cc/usa/grove-all-qual	14-261201-01-2									
Primary	4A	Waveshare	10299	RPi Camera (F)	Waveshare - Rpi Camera F	1	\$22.99					
Direct Link:		eshare.com/product/rpi-c				-						
Alternative	4B	Amazon	BOON9YWLHE	RPi Camera (F)	Waveshare - Rpi Camera F	1	\$25.99					
Direct Link:												
	Construction of the second sec	11.00		ALL		59						
Primary	5A	Amazon	B01N3161JP	PCB-02	Paxcoo - 30pcs PCS Board prototype kit	1	\$10.85					
Direct Link:	https://www.ama	azon.com/dp/B01N3161JP	/ref=sspa dk deta	ail 1?psc=1&pd rd i=B0	IN3161JP&pd rd w=yAgOz&pf rd p=f0dedbe2-13c8-4136-a746-439	8ed93cf0f&pd r	d wg=UUsYT&pf					
Alternative	5B	Digi-Key	1738-1001-ND	FIT0203	Breadborad General Purpose PTH	3	\$2.99					
Direct Link:	https://www.digi	key.com/product-detail/er	/dfrobot/FIT0203	3/1738-1001-ND/6588423	3&?gclid=Cj0KCQiA7briBRD7ARIsABhX8aDCntKNDULmZ72ZkqhuVc4C	5vtcbzgMX8sMjn	tcellGEL57hit81g					
				C 100 C 100 C								
Primary	6A	Digi-Key	377-2093-ND	BC-32625	Jumper Kit Various 26AW G 65Pcs	1	\$5.30					
Direct Link:		key.com/product-detail/er	-				1 100					
Alternative	6B	Amazon	B0728C8QHN	EA-BJW-A-=130	Jumper Wires Male to Male (130 pieces)	1	\$7.89					
Direct Link:	https://www.ama	azon.com/SIM-NAT-Solderl	ess-Breadboard-E	lectronic/dp/B0728C8QF	N/ref=asc_df_B0728C8QHN/?tag=hyprod-20&linkCode=df0&hvadid	1980728085428	hvpos=1o2&hvne					
n.:	7A		B077DN2PS1	BB-009	Provide and California ALLUS DD 000 (2	1	67.00					
Primary	22.2	Amazon			Breadboard Solderless ALLUS BB-009 (3pcs)		\$7.99					
Direct Link: Alternative	https://www.ama 78		1738-1326-ND	PCB-Board/dp/B0799ZS5 FIT0096	N3/ref=sr 1 20?s=electronics&ie=UTF8&gid=1543275344&sr=1-208	keywords=proto 2	\$3.19					
Direct Link:		Digi-Key key.com/product-detail/er			BREADBRD TERM STRIP 3.20X2.00"	2	\$5.15					
Direct Link;	nups.//www.digi	key.com/product-detail/er	/011000t/FI10096	011/30-1320-WD//39/06	2							
Primary	8 A	Digi-Key	1050-1049-ND	A000062	Arduino DUE Board	1	\$37.40					
Direct Link:					22%utm_adgroup=General&slid=&gclid=CjOKCQiA7briBRD7ARIsABh)	and the second sec						
Alternative	8B	Arduino	A000062	A000062	Arduino DUE Board	1	\$38.50					
Direct Link:		uino.cc/usa/arduino-due	1000002	ACCOULT.		-	220.00					
Direct Linki	nups//store.arot	no.cc/usa/arouno-oue					2					

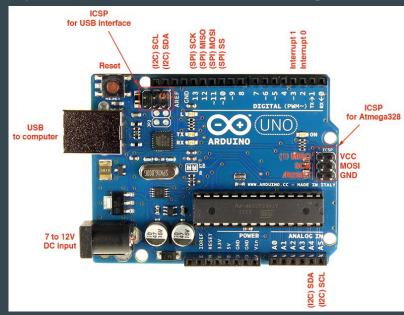
New Parts - RPi Night Camera

- Good for low light areas
- Smaller and lighter
- Compatible with RPi 2 and 3
- Will need to figure out how to mount



New Parts - Sensors

- Do not use I2C ports
- Use Analog Input signal ports
- Made by arduino (must have existing libraries)



GROVE - AIR QUALITY SENSOR V1.3

Code: C000138

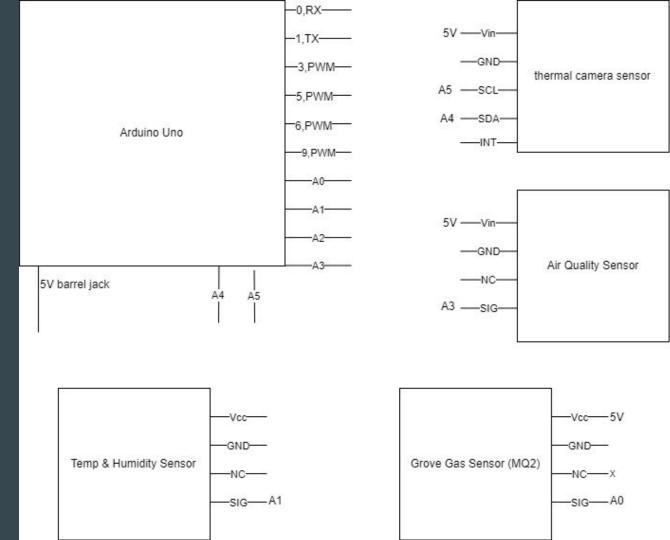


GROVE - TEMPERATURE & HUMIDITY SENSOR PRO Code: C000178



Schematic v 1.0

- 4 sensors & arduino
- A4 & A5 are I2C pins



Mechanical Arm and GUI

There is currently no updates on the Mechanical Arm and GUI.

Lemek is working on the GUI with RPi

Adrian and Nelson are working on CAD drawing for the different design ideas the team is thinking about.

Action Items for 2/05/19

Stephanie

• Put in order for parts, get a locker, weekly report, then help Lemek with GUI Elizabeth

- Mount for RPi camera, protective casing for sensor package Nelson
- Finish CAD drawing for the lead screw design and begin on the bike chain alternative

Adrian

• Work on CAD drawing for arm design and research part prices Lemek

• Continue working on GUI - testing GStreamer on RPi

The team will meet in West's Lab on Wednesday to work with the existing robot