

Team members: Qi Zhao, Ke Xu, Ferguson Shi

Project name: Self-adjusted Photovoltaic device

Materials:

Solar Charge Controller 1: x1 \$20.99

https://www.amazon.com/gp/product/B06XWTKYDC/ref=ox_sc_act_title_1?smid=A18M12GR6V2Z8F&psc=1

Two DV-DV converters: x2 \$9.99 x 2

https://www.amazon.com/gp/product/B079HY3N1S/ref=ox_sc_act_title_13?smid=A11T9PMJRD9SL&psc=1

Rechargeable batteries: x1 \$18.57

https://www.amazon.com/gp/product/B009NEKAEA/ref=ox_sc_act_title_2?smid=ATVPDKIKX0DER&psc=1

battery holder: x1 \$ 8.00

https://www.amazon.com/gp/product/B00VE7HBMS/ref=ox_sc_act_title_3?smid=A353AQG9I0DZD6&psc=1

Steel axis1: x1 \$8.06

https://www.amazon.com/gp/product/B00FHMA3D0/ref=ox_sc_act_title_4?smid=A1THAZDOWP300U&psc=1

steel axis2: x1 \$8.49

https://www.amazon.com/gp/product/B0723BRMRT/ref=ox_sc_act_title_5?smid=A1M8G92U41XEUX&psc=1

solar panel power: x1 \$21.95

https://www.amazon.com/gp/product/B071CZ4HCS/ref=ox_sc_act_title_6?smid=A3BG62S1F23IH5&psc=1

gear1: x1 \$1.49

https://www.amazon.com/gp/product/B00V66YJQI/ref=ox_sc_act_title_7?smid=A36I7QL8841UPM&psc=1

gear2: x1 \$ 10.99

https://www.amazon.com/gp/product/B06XMP5F8/ref=ox_sc_act_title_8?smid=A36OLJK51DOCLZ&psc=1

Lamp base: x1 \$8.99

https://www.amazon.com/gp/product/B06XRZ3M39/ref=ox_sc_act_title_9?smid=A1EBQ087Q9F826&psc=1

Lamps: x1 \$5.99

https://www.amazon.com/gp/product/B01BRN3O6K/ref=ox_sc_act_title_10?smid=AFVLWC4GC6BLQ&psc=1

step motors: x1 \$12.99

https://www.amazon.com/gp/product/B01IP7IOGQ/ref=ox_sc_act_title_11?smid=A3IRH1M32QH71&psc=1

solar energy bulb: x1 \$12.99

https://www.amazon.com/gp/product/B071GNGTRD/ref=ox_sc_act_title_12?smid=A33NMDVK8RW4QH&psc=1

solar power bank x1 \$21.99

https://www.amazon.com/gp/product/B01MQ4R15B/ref=ox_sc_act_title_14?smid=A1CNW5E0C9S28F&psc=1

solar panel1: x1 \$19.99

https://www.amazon.com/gp/product/B00FF1KEMI/ref=ox_sc_act_title_15?smid=A5KU5HDAPDC75&psc=1

solar panel 2: x1 \$24.88

https://www.amazon.com/gp/product/B071ZV2KYN/ref=ox_sc_act_title_16?smid=A2ACZILVJ1K7Z0&psc=1

outdoor solar lamp: x1 \$14.99

https://www.amazon.com/gp/product/B074WP6YVV/ref=ox_sc_act_title_17?smid=A1HBSF59SIKAA3&psc=1

attitude sensor1: x1 \$35.99

https://www.amazon.com/gp/product/B06XGR1B79/ref=ox_sc_act_title_18?smid=A2OCOGC9B25845&psc=1

attitude sensor2: x1 \$9.99

https://www.amazon.com/gp/product/B06XHK8BK6/ref=ox_sc_act_title_19?smid=A26ATEC08S9EFM&psc=1

GPS module: x1 \$20.99

https://www.amazon.com/gp/product/B01AW5QYES/ref=ox_sc_act_title_20?smid=A3WSD51PE9OSV&p_sc=1

Raspberry Pi 3 kit: x1 \$89.99

https://www.amazon.com/gp/product/B01C6Q4GLE/ref=ox_sc_act_title_21?smid=A30ZYR2W3VAJ0A&p_sc=1

Total: \$398.29