**Build of Material for Development of Advanced Intelligent Manipulation (AIM)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Part Name** | **Quantity** | **Unit Cost** | **Total Cost** | **Reference Link** |
| Arduino Nano | 1 | $24.90 | $24.90 | <https://store-usa.arduino.cc/products/arduino-nano?selectedStore=us> |
| Arduino Uno | 1 | $27.60 | $27.60 | https://store.arduino.cc/products/arduino-uno-rev3/ |
| Servo Shield | 1 | $17.50 | $17.50 | https://www.adafruit.com/product/1411 |
| nRF2401L module | 2 | $3.00 | $6.00 | https://shopee.sg/product/365165105/12495262848?gad\_source=1&gclid=Cj0KCQiAsburBhCIARIsAExmsu7bJVd7MWT6CU8xZOlgku24LV\_1pR2Oz6s-2ZNwYj2YfmEa0CFwkHMaAmrJEALw\_wcB |
| GY-85 9 Axis IMU 9 DOF Sensor Module | 1 | $8.49 | $8.49 | <https://mybotic.com.my/accelerometer-gyro/gy-85-imu-9dof-sensor> |
| MPU 6050 3-Axis Accelerometer and Gyroscope | 1 | $2.16 | $2.16 | <https://shopee.sg/product/517411014/18173264900?gclid=Cj0KCQjw84anBhCtARIsAISI-xeQa17jm_pNyaBeraDB3Iagn3cM0PfjRWzYce4O96mE0n6adsgnoH8aAj7pEALw_wcB> |
| MG966R 180 degrees positional servo motors | 2 | $20.00 | $20.00 | https://www.kiwi-electronics.com/en/mg996r-180-digital-metal-gear-servo-11kg-cm-55g-3020?country=&gad\_source=1&gclid=Cj0KCQiAsburBhCIARIsAExmsu4Elr10PvFs63tMe3MRZhsQoS-Ahi4slQHlHcVFDO3MWrFeIo5rgmoaAogMEALw\_wcB |
| Pan Tilt Mount for MG996R servo motors | 1 | $3.05 | $3.05 | https://shopee.sg/product/1018796041/23245758065?gad\_source=1&gclid=Cj0KCQiAsburBhCIARIsAExmsu7kZ6PA\_aFk8LLfgl15ra3NjGn6UaEH9uAMX2LWy9Vm01YdMnvdK88aAg3eEALw\_wcB |
| Intel RealSense Depth Camera (D415) | 1 | $368.00 | $368.00 | https://www.bhphotovideo.com/c/product/1567312-REG/intel\_82635asrcdvkhv\_realsense\_depth\_camera\_d415.html?gad\_source=1&gclid=Cj0KCQiAsburBhCIARIsAExmsu4VJe3ONY-EOY7uN07yznWpf0I19vpilfRcX-scakOZW5UwWqtntCMaAl\_3EALw\_wcB |
| Breadboard (400 points) | 2 | $2.66 | $5.32 | <https://shopee.sg/product/110868311/1945683558?gclid=Cj0KCQjw84anBhCtARIsAISI-xfZq1iv1iUWFlqD0XS1vhOebEmlJDmrJUVEIbEmP40x9xU7eq3yzmkaAjH1EALw_wcB> |