

# Project Proposal: Boo-Bot

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CS 370

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## Project Objective

### Members

Members of this project are as follows:

- Daniel Garcia
- Devin Pohl

## Software Required

### Overview

### Justification

## Hardware Required

### Overview

### Justification

### Bill of Materials

Below is a bill of materials for this project, including all hardware used. All components are purchased from ebay, with shipping times between one and three weeks.

Amount	Component	Price Ea (\$)	Description	Cost (\$)
2	Drivers	3.16	A4988 Stepper Motor Driver Module	6.33
2	Motors	3.98	MINEBEA NMB 2-phase 4-Wire 18° Stepper Motor	7.96
1	Amp	4.99	MAX98357A I2S Class D amplifier	4.99
1	Speaker	0.99	8 ohm speaker	0.99
1	Lipo	15.05	Lipo battery pack	15.05
1	Microphone	7.51	I2S MEMS Microphone SPH0645LM4H	7.51
1	Voltage Regulator	0.79	3-24V to 12V 2A Adjustable Boost Step-Up Converter	0.79
10	Capacitors	0.466	16v 1000UF Electrolytic SMD	4.66
1	Raspberry pi	29.99	Raspberry Pi 3 Model A+ 2018 model	29.99
1	9-axis MPU	4.60	MPU9250 (Gyro, Accelerometer, Compass)	4.60
1	ADC	1.69	INA219 DC current and voltage sensor	1.69
			Total:	84.56