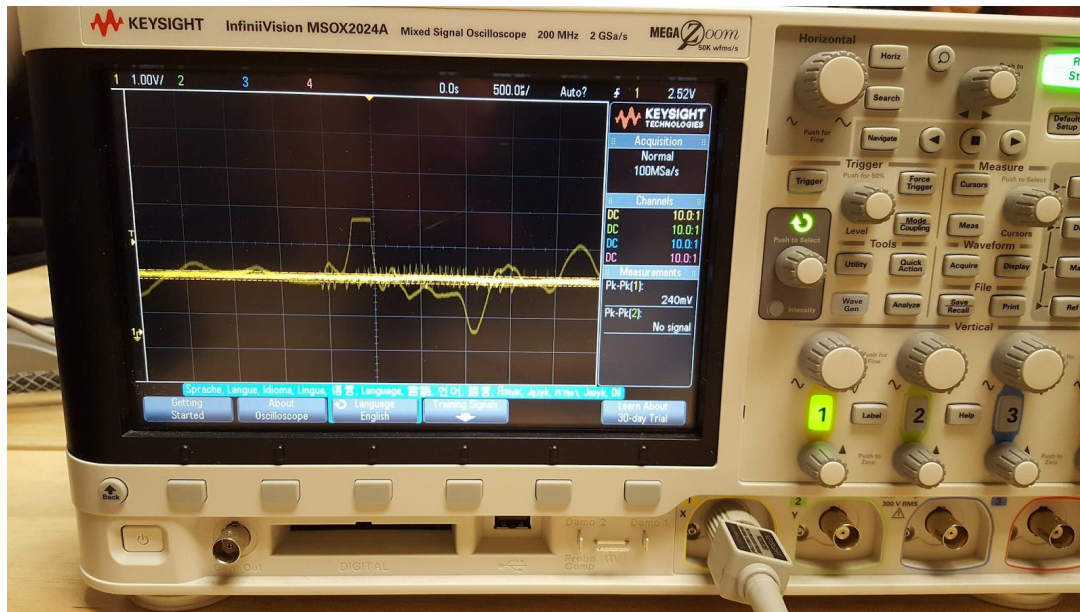


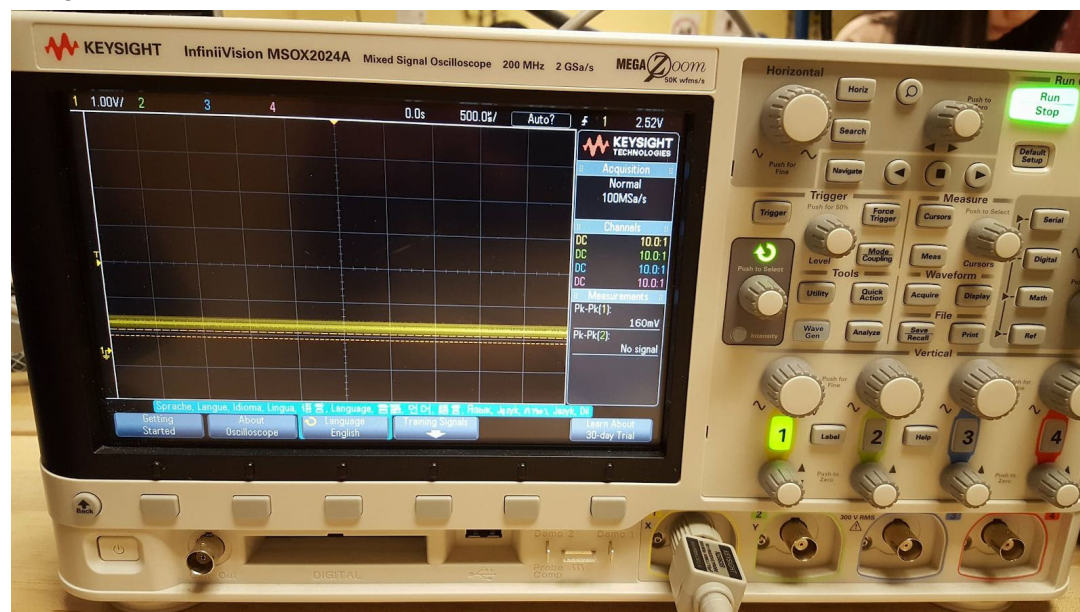
Mark Lui (A12961583)  
Michael Shum (A99005222)  
Michael Li (A12420469)  
Raymond Yu (A13113740)

### ECE 140A Lab 3

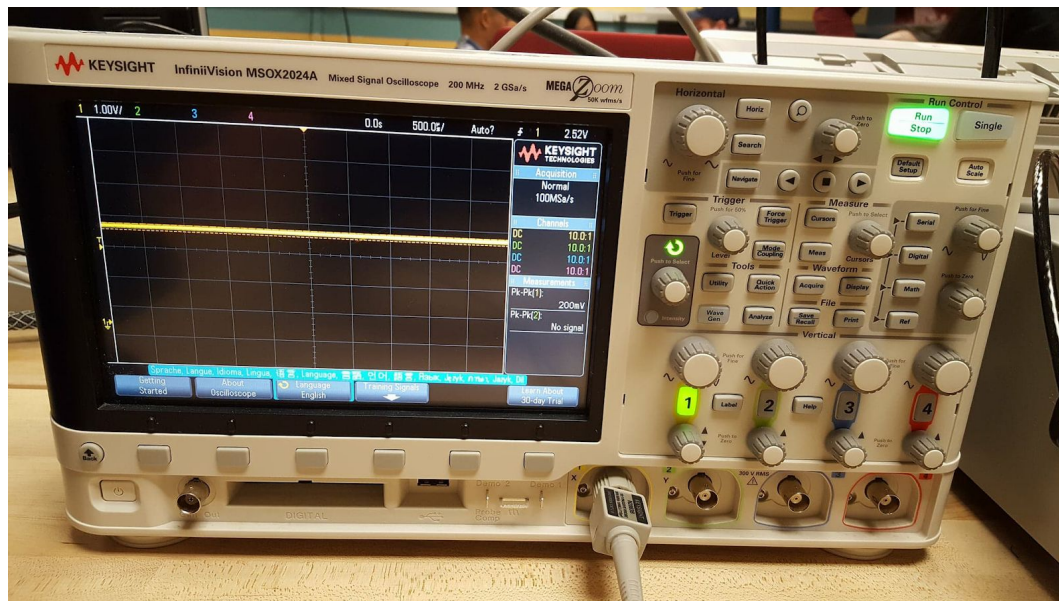
Range of Audio Signal: 1.6V - ~2.2V



Range of Envelope: 170mv - 1.6V



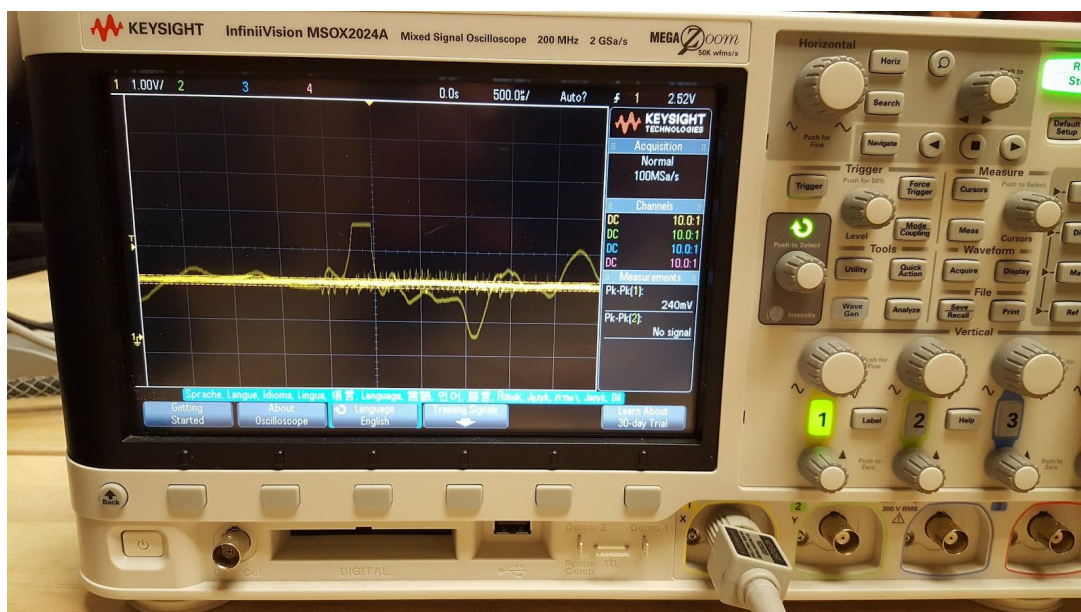
Range of Gate: 3.35V



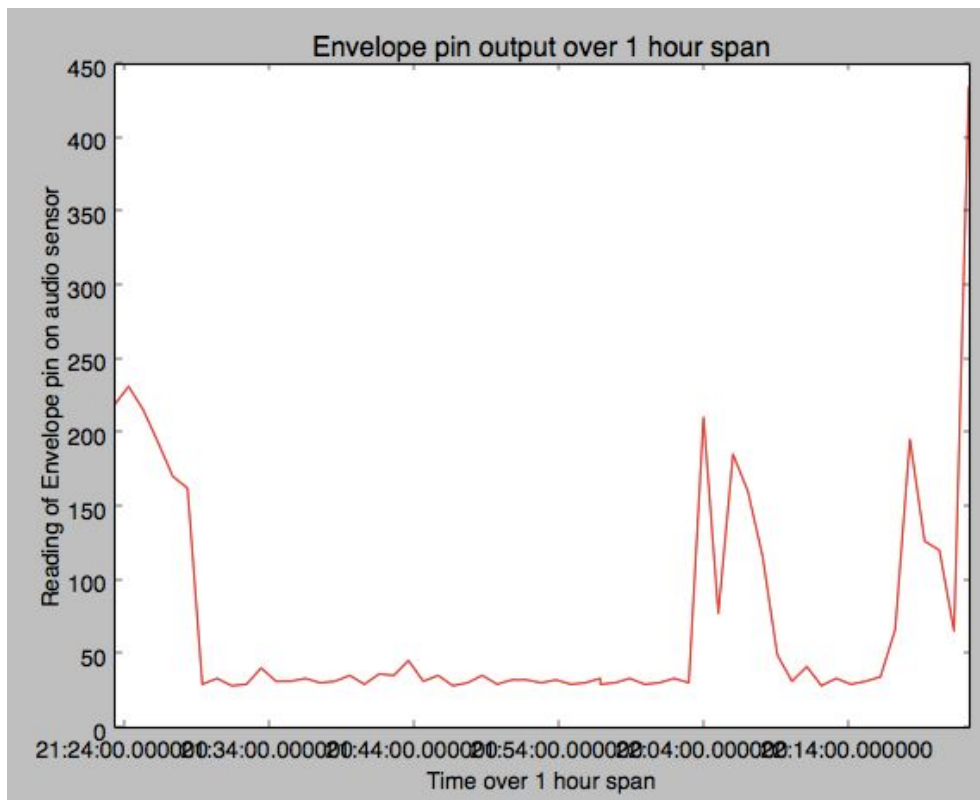
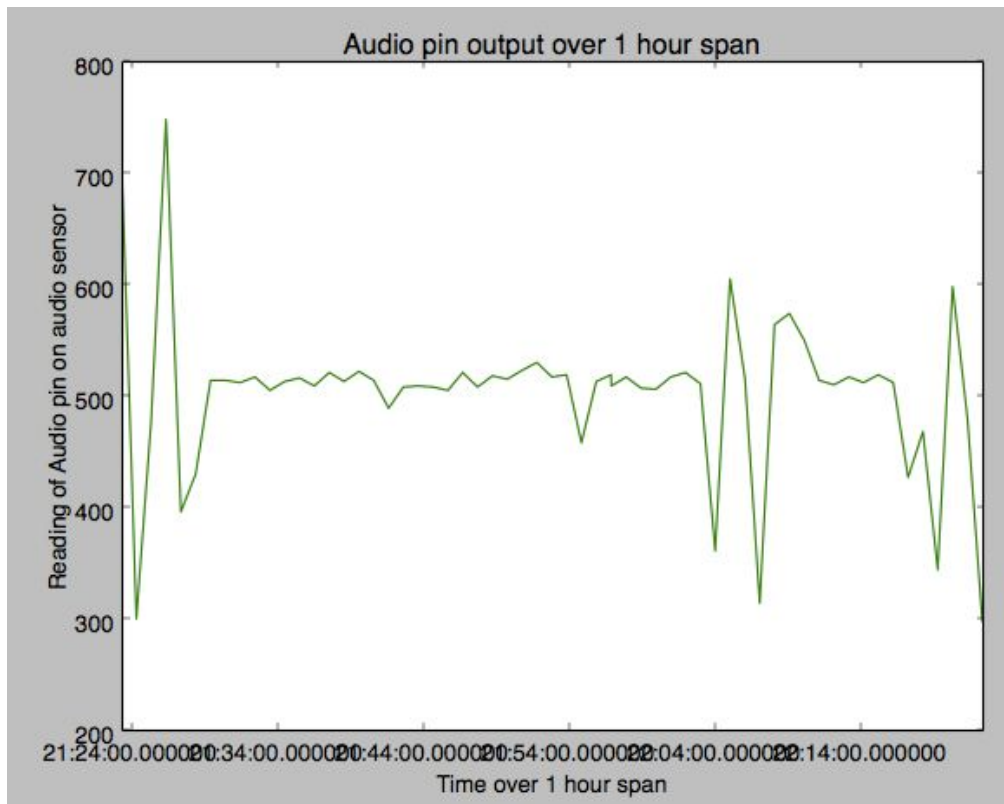
The ranges for the 3 values seem correct, ranging from Vdd, 3.3V, to 0V.

Because we were told to wire 3.3V to the sound detector, our circuit was not incorrect in the first place.

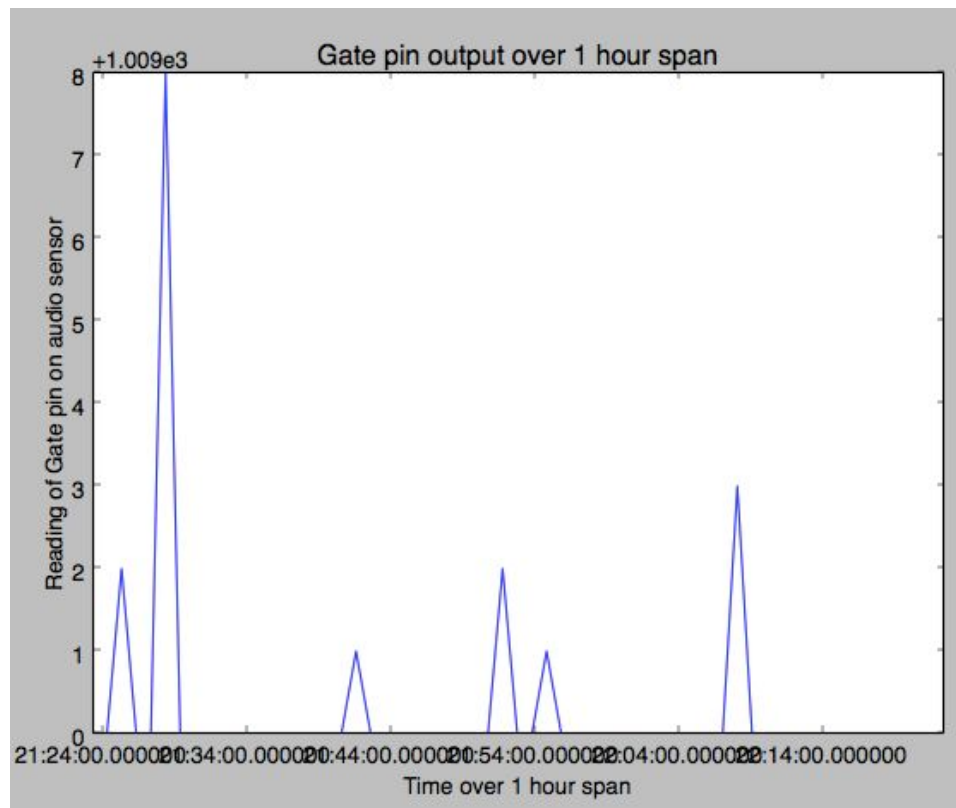
When we wired CH1 to the audio pin and CH2 to the input of the MCP3008, we did not see any differences in the signals -



## SmartSound readings







This sensor data was obtained in the Maker Lab. It wasn't too loud, but we started clapping to vary the data of the circuit.

# Very Important Sensor Data by FriedPi

Date	Temp	Hum	Light	Sound Envelope
2018-02-12 21:06:42	75	26	750	28
2018-02-12 21:07:45	75	26	299	29
2018-02-12 21:08:47	75	26	366	26
2018-02-12 21:09:52	75	26	399	24
2018-02-12 21:10:54	75	26	864	27
2018-02-12 21:11:56	75	25	889	22
2018-02-12 21:12:01	75	25	904	25
2018-02-12 21:13:03	75	25	903	32
2018-02-12 21:14:05	75	25	903	31
2018-02-12 21:15:09	75	25	902	24
2018-02-12 21:16:12	75	25	903	27
2018-02-12 21:17:14	75	25	897	31
2018-02-12 21:18:16	75	26	892	26
2018-02-12 21:19:18	75	26	472	29
2018-02-12 21:20:20	75	29	331	29
2018-02-12 21:21:22	75	35	327	30
2018-02-12 21:22:24	75	40	318	27
2018-02-12 21:23:26	75	43	310	27
2018-02-12 21:24:28	75	34	301	27
2018-02-12 21:25:35	76	28	945	66
2018-02-12 21:26:40	76	27	899	142
2018-02-12 21:27:44	76	26	898	28
2018-02-12 21:28:46	76	26	899	27
2018-02-12 21:29:48	76	26	900	26
2018-02-12 21:30:50	76	26	899	27
2018-02-12 21:31:52	76	26	898	27
2018-02-12 21:32:54	76	26	898	30
2018-02-12 21:33:57	76	25	898	29
2018-02-12 21:34:59	76	25	898	28
2018-02-12 21:35:01	76	25	898	26
2018-02-12 21:36:05	76	25	897	27
2018-02-12 21:37:07	76	25	898	30
2018-02-12 21:38:09	76	25	898	28
2018-02-12 21:39:14	76	26	897	29
2018-02-12 21:40:16	76	26	898	27
2018-02-12 21:41:18	76	26	897	26
2018-02-12 21:42:20	76	26	897	29
2018-02-12 21:43:25	76	26	898	28
2018-02-12 21:44:27	76	26	900	143
2018-02-12 21:45:29	76	26	898	136
2018-02-12 21:46:31	76	26	897	57
2018-02-12 21:47:33	76	25	897	43
2018-02-12 21:48:35	76	25	897	31
2018-02-12 21:49:37	76	26	898	28
2018-02-12 21:50:39	76	26	897	29
2018-02-12 21:51:41	76	26	898	29
2018-02-12 21:52:46	76	26	897	27
2018-02-12 21:53:48	76	26	898	38
2018-02-12 21:54:50	75	26	897	27