

# Maxwell McKinnon

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## EXPERIENCE

### Apple, Cupertino — *Level 3 Audio SW Engineer*

2017 - Present

Room adaptation, beamforming, and undisclosed HomePod technologies

DSP analysis and cross platform OS on device anomaly detection: HomePod, Watch, iPhone, iPad, MacBook

Music, sound, and scene classification

### Maxim Integrated, San Jose — *MTS Audio Applications*

2014-2017

Led a four-person automation team through two revisions of Audio team silicon and designed the layout of board to test the silicon

Built two automation tools: xTalk and INLDNL

Built and presented two audio demos at CES 2017 in Chinese and English

### Maxim Integrated, San Jose — *AMTS Audio Applications*

2013-2014

Implemented two microphone solution to digital cocktail party problem (ICA)

Mentored five field and manufacturing engineers from our China team

### Maxim Integrated, Sunnyvale — *Intern Audio Applications*

2011 and 2012

Automated equipment using I2C and GPIB with C#, Python, and VBA

Measure, analyzed, and created everything in a class D audio chip datasheet

Designed and built (somewhat in that order xD) a rotator for HATS with Arduino, stepper motors, and laser cutting

## PROJECTS

### Generic EVKIT Hardware GUI — *For Maxim Integrated*

Built a tool to automatically generate EVKIT GUIs' register maps by parsing data in Contour. GUI is generated and ready to go on day one of new silicon.

Made a spinoff of the tool to generate Linux ALSA drivers.

## SKILLS

Audio

DSP

Python

SKLearn

Pytorch (cloud prod)

Keras

CoreML (device prod)

Turi

MATLAB

Swift

C#

C/C++

Linux/Android & ALSA

Embedded HW/SW

Chinese

## AWARDS

Maxim Toastmaster

2015 Competition

1st Place

San Jose Toastmaster

2015 Competition

3rd Place

## More?

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