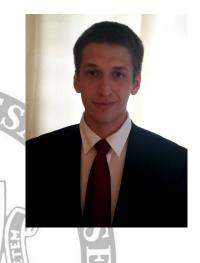
## <u>UMassAmherst</u>

Arseny Izotov



Justin

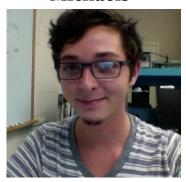
Lad

InteL-E-Ds





Alden Michaels

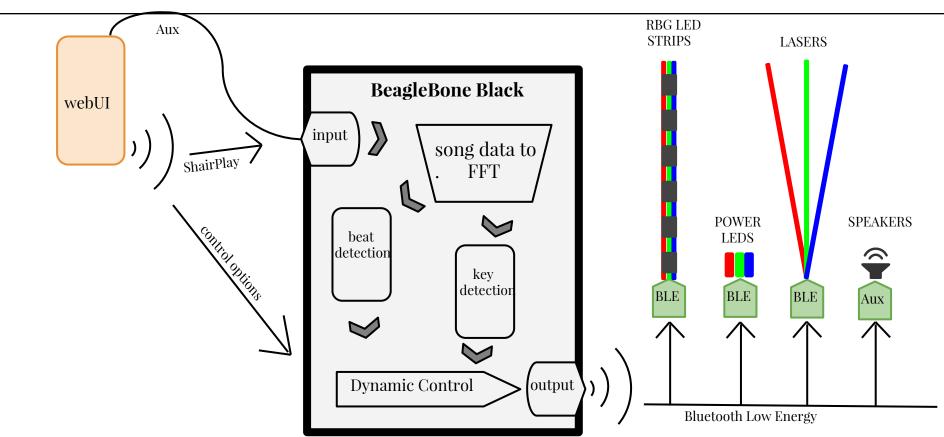


Sade Luwoye

### Recap: The InteL-E-Ds Vision

- LED Music Controller
  - Control LEDs with webUI "remote"
  - Live Stream Play
    - Auxiliary
    - ShairPlay
  - Calculate Song Characteristics
    - BPM, Key
  - Control LEDs to vibe with song
- Final Product Price < \$200

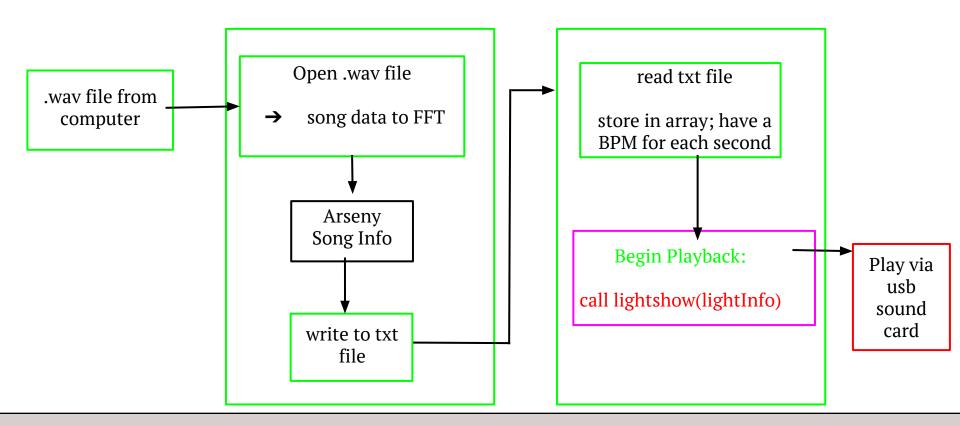
#### The Big Picture



# Proposed MDR Deliverables

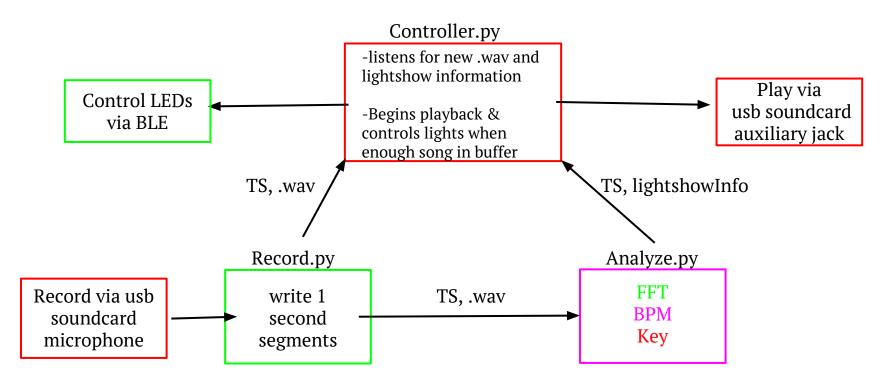
- Send song to beaglebone via shareplay
- WebUI to control lights
- Convert .wav file to FFT array
- Calculate BPM for every time of song
- Lights blink to beat of song

# BLOCK 2: File on Computer Version

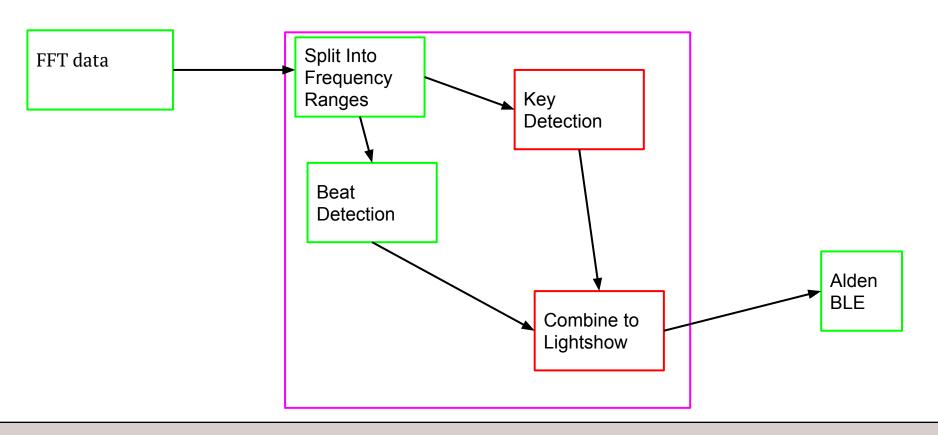


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#### BLOCK 2: Live Stream

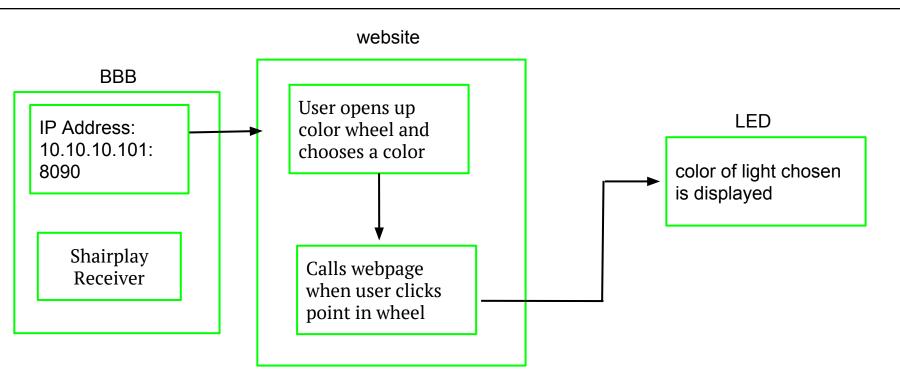


# BLOCK 3: Analyze & Lightify

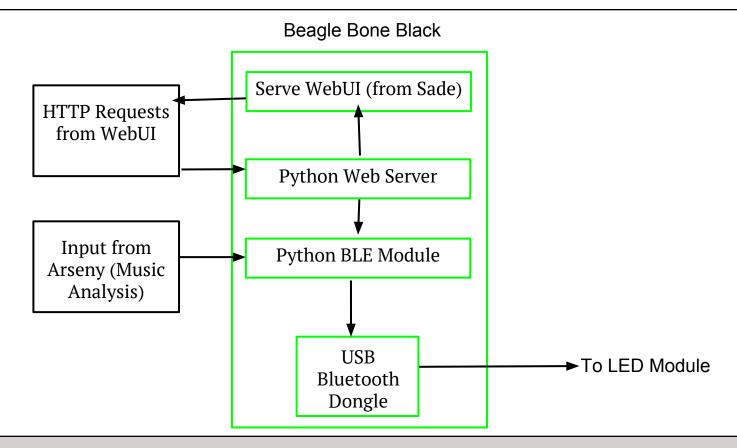


# Demonstration

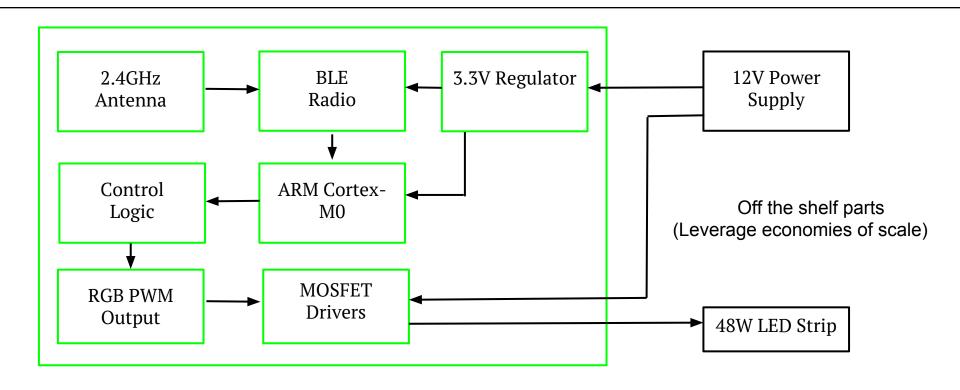
#### BLOCK 1: WebUI Interface



# Alden's Beagle Bone Black Block



#### Alden's LED Module Block

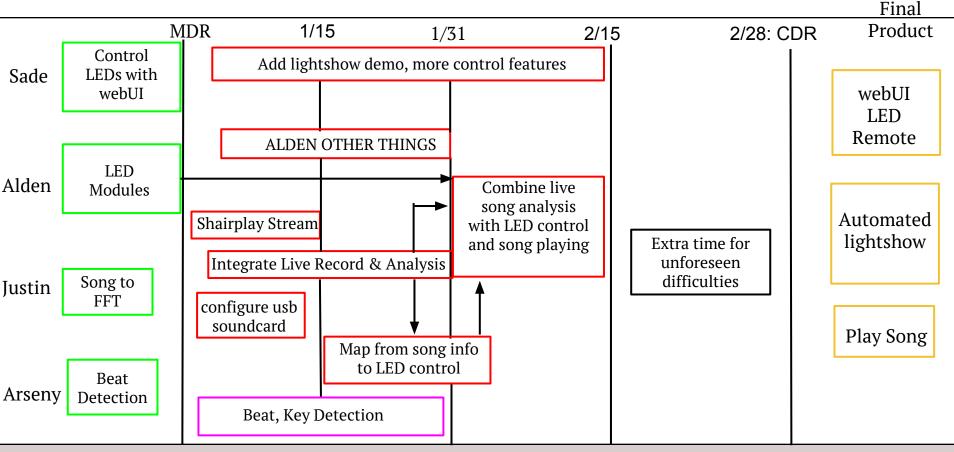


# Demonstration

#### Proposed CDR Deliverables

- Complete subsystems
  - Live stream functional
    - Auxiliary
    - Shairplay
  - Key Detection
- Integrate Systems
  - Coordinate live recording and analysis
  - Coordinate LED control with song playing
  - Additional webUI functionality
    - Couple lightshow modes
    - Buttons for specific colors

#### Product Timeline



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# Questions?