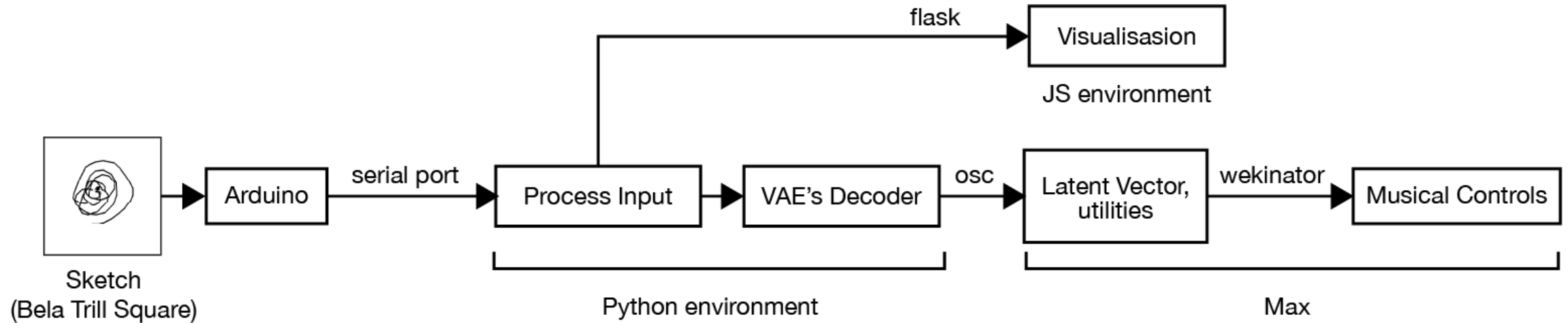


Sketch-to-Sound Mapping Using Semi-Supervised Learning

Project Timeline

System implementation			
	Physical housing		
		Sound synthesis program	
			practice for performance
			visualisation

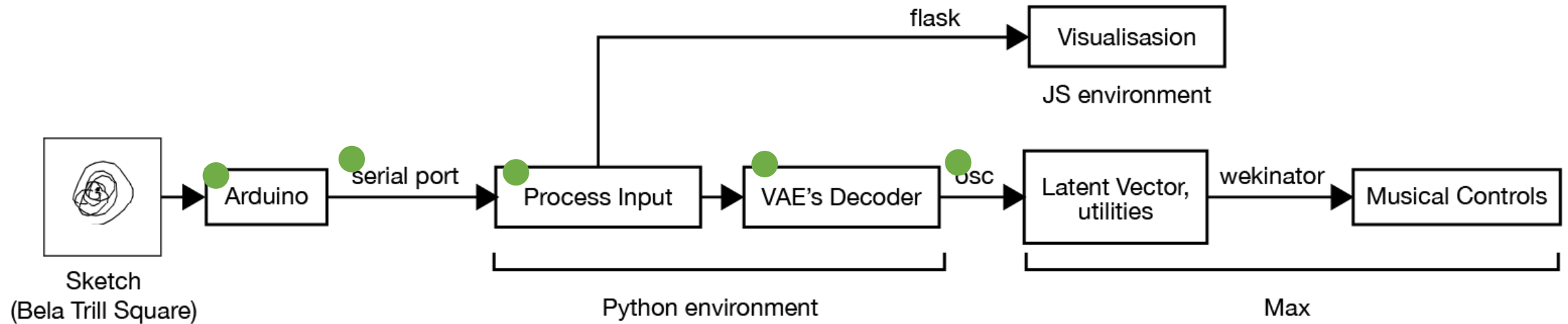
System Specification



Four System Components:

- (1) Arduino sensors
 - (2) A Python program to collect sensor data to graphic, and run the VAE's decoder
 - (3) A localhost webpage displaying the sketch + some visualisation
 - (4) A Max patch that maps the latent vector to musical control, and runs the sound synthesis program
-

System Specification



What Have Been Done

- (1) An updated code for TrillSquare that filters out the noise, directly outputs x, y coordinates
- (2) x, y coordinates are ported to a Python program to synthesis a sketch as image
- (3) A Hyperspherical VAE is trained on the SketchingSounds Dataset

Todo

- (1) Deploy the trained VAE model to the Python program
- (2) Max Patch for sound synthesis + wekinator
- (3) Visualisation
- (4) Physical container