Contextual Shape Descriptor Using Line Integrals

- Stem Cell
Step 1: Boundary Extraction
Step 2: Sub-sample

- 24 sub-samples points are represented by green circles
- 25 coordinates because first point repeats itself in the end
- Sub-samples are evenly distributed
Step 3: Line Integral Between the Points

Delta t = .01
Step 3: Line Integral Between the Points Cont.
Step 4: Calculating Intensity

- Red Channel Intensity
- Find the average between delta t points
- Closer is weighted more than further away
Step 5: Measuring Intensity

- 25 Boundary Point Indices
- Each square represents one line integral from one point to another