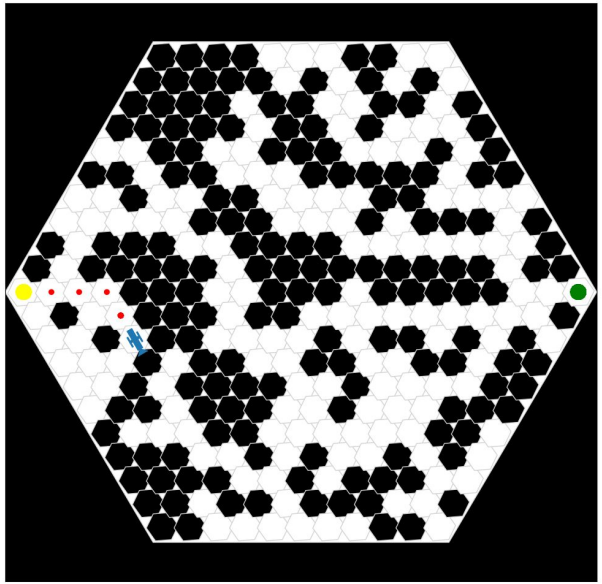
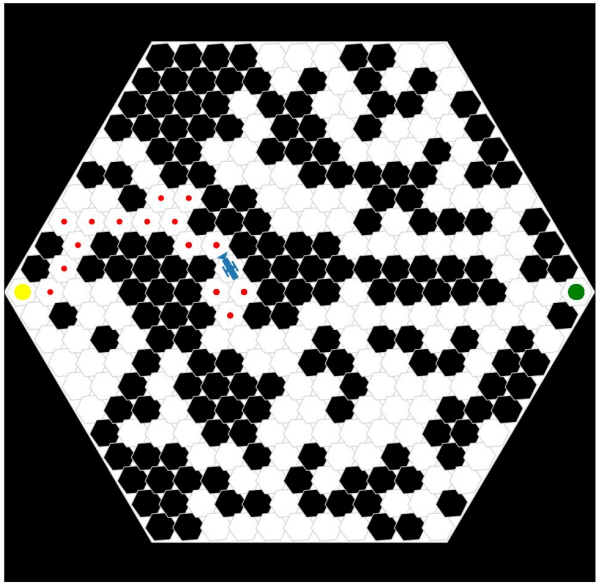
# BME 468 (assignment 11)

Andrew Thompson

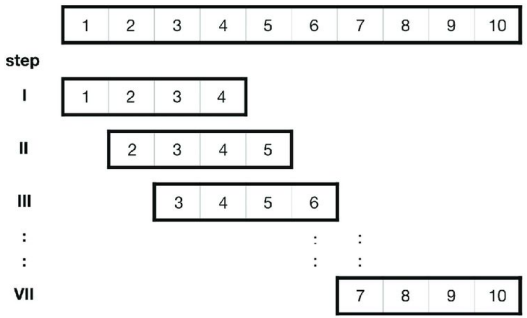
# effect of ‘short-term memory’ via moving window



random exploration



random exploration + visited cells window (VCW)

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[72, 82, 103]
[82, 103, 113]
[103, 113, 123]
[113, 123, 112]
[123, 112, 122]
[112, 122, 132]
[122, 132, 143]
[132, 143, 153]
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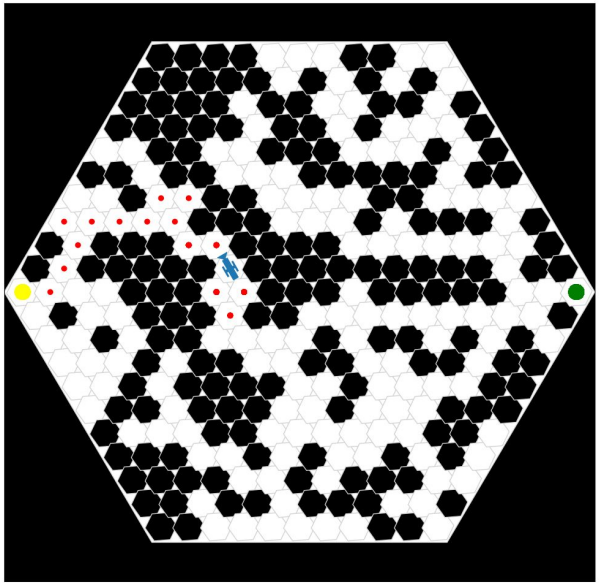
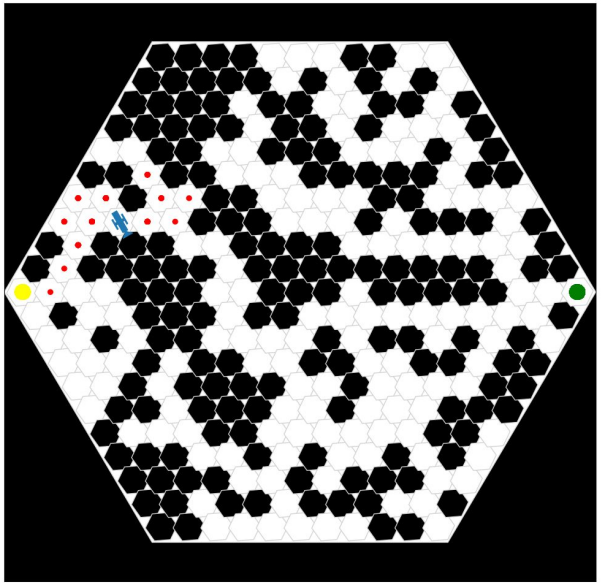
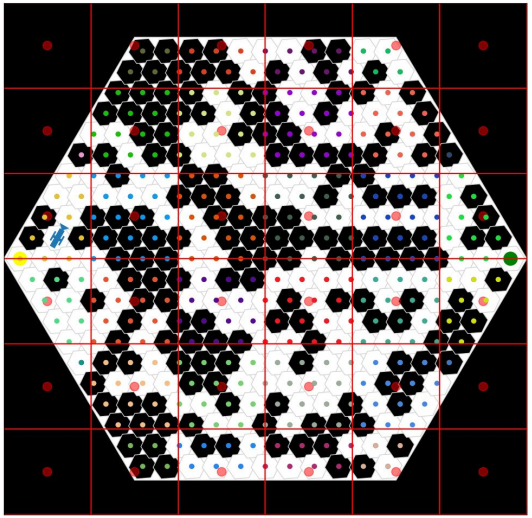
# effect of discretization



random exploration +
VCW



random exploration +
VCW + patches

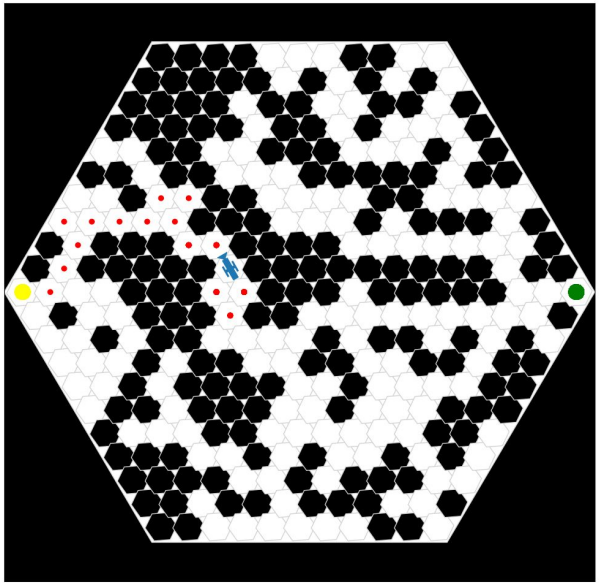


discretization to 36
patches

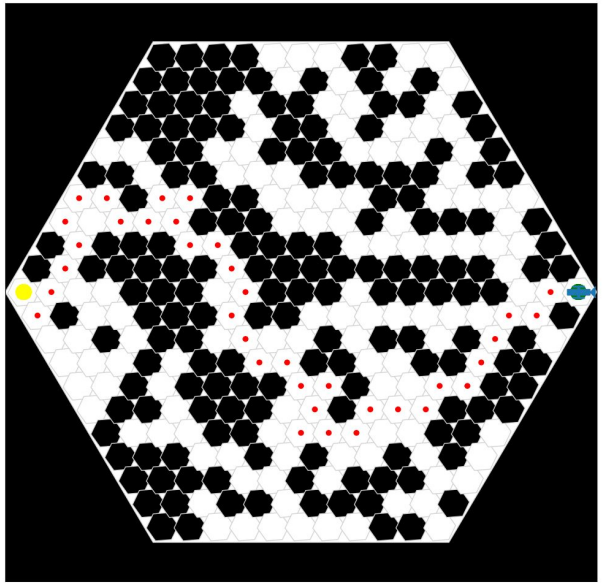
$$\forall \text{ patches } i : o_{p_i} = \frac{n_{occluded}}{n_{total}}$$

$$r_{\text{cell\_idx}} = r_{\text{cell\_idx}} - (r_{vcw} * o_{p_i})$$

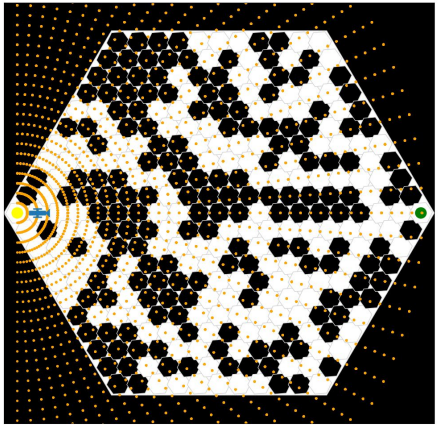
# effect of ray tracing



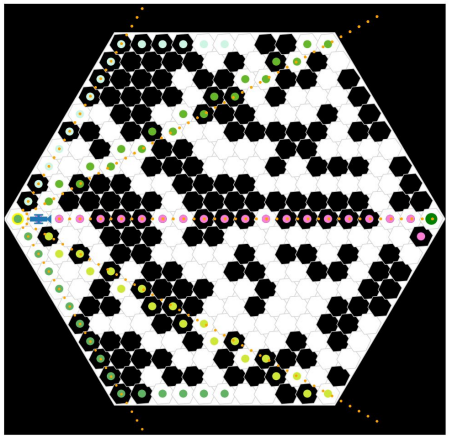
random exploration +
VCW



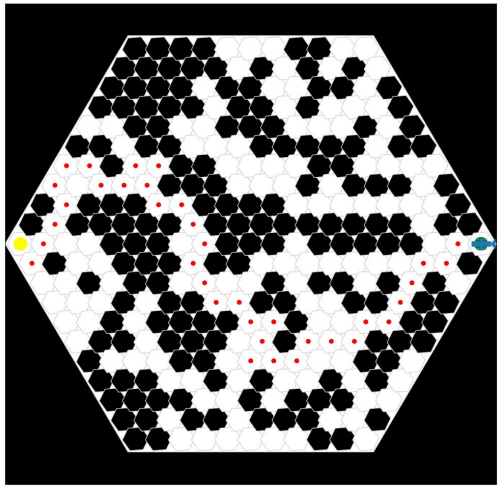
random exploration +
VCW + ray tracing



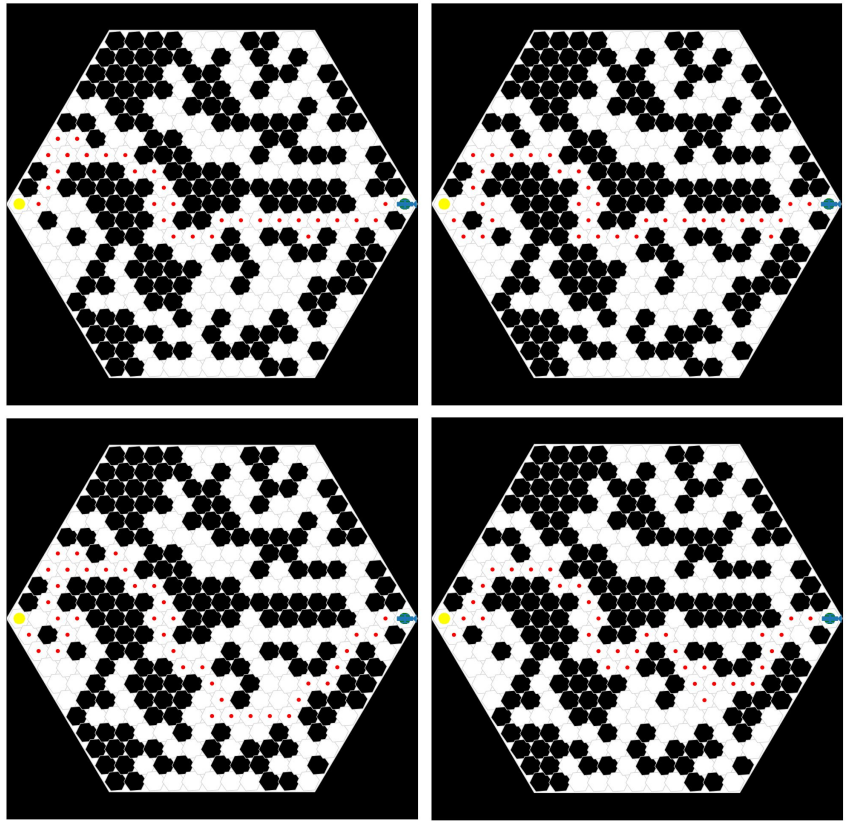
tracing using 25 rays



# combining approaches

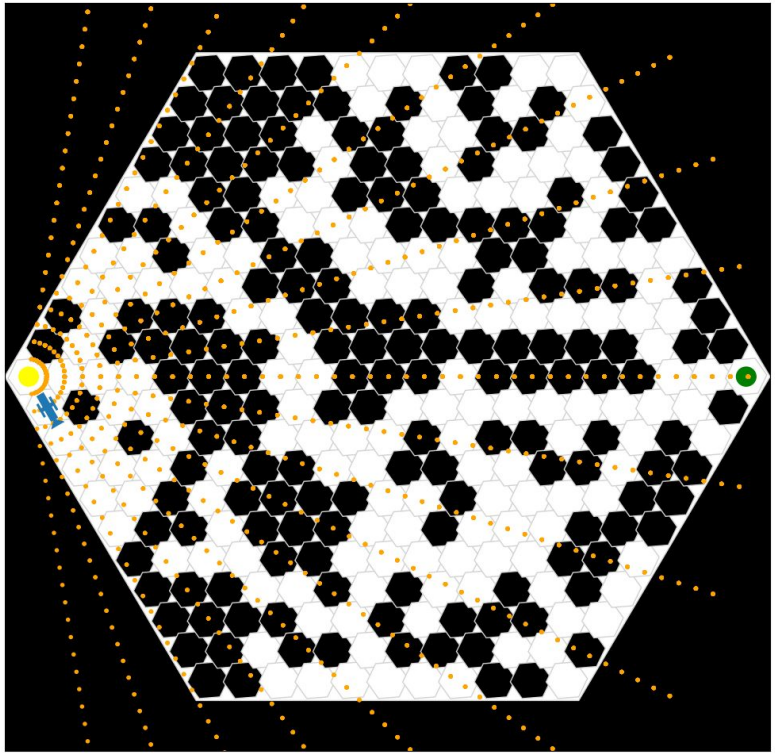


random exploration +
VCW + ray tracing

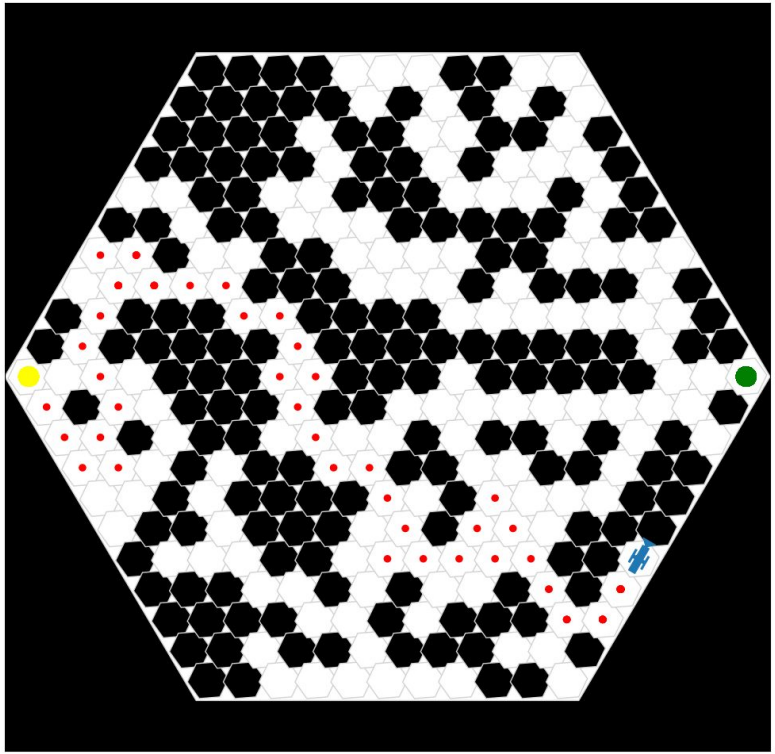


random exploration +
VCW + ray tracing +
patches

# effect of low-resolution ray tracing



tracing with 10 rays



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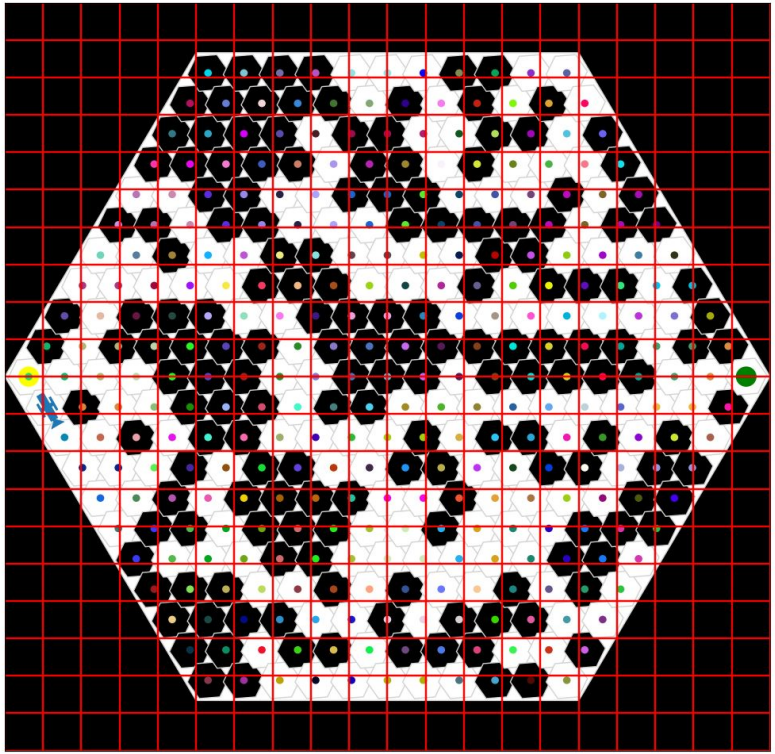
# effect of high-resolution patches



discretization with 400 patches