Re: Generalized Pursuit Curve Problem

Source: http://sci.tech−archive.net/Archive/sci.math/2004−09/1224.html

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Date: 09/06/04

Date: 6 Sep 2004 11:16:24 −0700

Here's one more from Mamikon, which You might understand
(for me this one will take some time)
http://www.its.caltech.edu/~mamikon/Article.html
You have to scroll to the
right side for the english text.
Now, what i make from Your problem:
A moving point traces out a curve. You can describe it with
vector−arrows in a coordinate system. And You have a parameter,
let's say the length of arc (equals the distance the point travelled)
You differentiate with this parameter − the result is a moving
vector−arrow of unit−length with the (oriented) direction of
the tangent to the curve. The tips (arrow−heads) of these vectors
create a second curve (and the area between the two curves is
only dependent on the difference of direction between a
starting−point and an end−point (for a concave curve) and not
the distance travelled, says Mamikon)
(Now multiply these vector−arrows, which indicate the direction of
travel by minus one, or let them show to the opposite direction.
Then You can consider the original moving point as a dog always
runing´into the direction of the arrowhead(the fox), which
created the second curve).
After this You can advance, let's say to variable speed.
Have fun with it
Hero