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Sungjong No* (sungjongno84@gmail.com), Seoul, South Korea, **Seungsang Oh**, Seoul, South Korea, and **Minjung Lee**, Seoul, South Korea. *Arc index of spatial graphs.*

In knot theory, the arc index is a very useful invariant. Since knot is a special example of embedded graph, it can extend to graph theory. By using the arc presentation of graphs, we get an upper bound of arc index and stick number of an embedded graph. The arc index $\alpha(G)$ is less than or equal to $c(G) + e(G)$ for the crossing number $c(G)$ and the number of edges $e(G)$ of the embedded graph G . Furthermore the stick number $s(G) \leq \frac{3}{2}c(G) + 2e(G) - \frac{v(G)}{2}$. (Received August 19, 2015)