



1. The US military using swarm intelligence for controlling drones. They take user suggestions into their search planning algorithms, and role negotiation is also used https://www.researchgate.net/publication/220834281_Swarm_Control_in_Unmanned_Aerial_Vehicles
2. NASA building resilient systems, and low-cost planetary exploration systems that can run autonomously for years in harsh environments. Also being used by NASA for communication network routing. <https://pdfs.semanticscholar.org/bb45/2fb2d9cbd3a634c999480047bb038017eb8a.pdf>
3. Finding tumours in bone scans. (i.e. metastasis) They used Stochastic Diffusion Search to do it https://www.researchgate.net/profile/Mohammad_Majid_Al-Rifaie2/publication/262223271_Identifying_Metastasis_in_Bone_Scans_with_Stochastic_Diffusion_Search/links/5402feb70cf2c48563afc642.pdf

4. Optimizing the design of structural material in civil engineering. Optimizing the position of supporting beams, and truss designs
[https://www.intechopen.com/books/theory-and-new-applications-of-swarm-intelligence/inverse-analysis-in-civil-engineering-applications-to-identification-of-parameters-and-design-of-str](https://www.intechopen.com/books/theory-and-new-applications-of-swarm-intelligence/inverse-analysis-in-civil-engineering-applications-to-identification-of-parameters-and-design-of-structure)
5. Shape optimization in microelectronic applications so that materials of different thermal properties can be placed to optimize heat transfer
https://doi.org/10.1142/9789814675017_0016