

**Dr. Anirban Sengupta "Design Space Exploration System and Method Thereof Using a Bacterial Foraging Optimization Mechanism", Patent No. 366323, May 2021, Granted by Indian Patent Office (IPO)**

Dr. Anirban Sengupta, Assoc. Professor in Computer Science and Engineering at IIT-I was recently granted a Patent from Indian Patent Office for inventing a design exploration system inspired by bacterial lifecycle that is useful for designing digital chips of camera systems and mobile devices. The invention is several magnitudes efficient than other state of the art inventions used for this purpose. The invention is capable to enhance the speed of the chips and reduce power using biological chemotaxis and elimination-dispersal process. The present invention relates to design space exploration (DSE), and more particularly to method and system for design space exploration in high level synthesis using bacterial foraging optimization mechanism for designing or obtaining an application-specific processor (ASP) or Hardware Accelerator or Intellectual Property Core. Below is the overview of his patented work.

