Research Opportunities in Semantic Computing, Semantic Search, Semantic Web & Semantic-Oriented Programming

Semantic Computing: Semantic Computing addresses technologies that allow users to create, manipulate or retrieve computational content based on semantics (“meaning”, “intention”), where “content” may be anything such as video, audio, text, software, hardware, network, environment, process, etc.

Semantic Search: Semantic search is a data searching technique in which the search results are based on the meaning of the query or words used for search.
De Virgilio, R., Guerra, F. & Velegrakis, Y. (2012) Semantic Search over the Web (Data-Centric Systems and Applications), Springer


Semantic Web: “The Semantic Web is an extension of the current web in which information is given well-defined meaning, better enabling computers and people to work in cooperation.” Berners-Lee et al
Journal on Data Semantics, A springer journal.

Semantic-Oriented Programming: A programming approach that creates meaning as the central principle of organizing programming thought.