

The author's voice

Maschio and Schiozer (2013) proposed a procedure to update probability density functions through an iterative process using a parametric PDF fitting. They also included a method to identify the most influential attributes in the reservoir response. Although there are some similarities to the present work, the main difference is that here we do not need to assume any kind of distribution because we propose the application of a nonparametric estimation method. Another important difference is that, in this paper, the process of probability redistribution is based on a set of models selected according to matching quality measured by a normalized misfit. In Maschio and Schiozer (2013), all models were used in the process. Another difference is that here we propose the use of the covariance and correlation matrix while in the previous work a polynomial fitting was employed.

(Maschio C, Schiozer DJ. Probabilistic history matching using discrete Latin Hypercube sampling and nonparametric density estimation. *Journal of Petroleum Science and Engineering* 147 (2016) 98–115)

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In a web-services environment a provider makes a set of services available for consumers [1]. The webservices are supported by a complex software infrastructure, which typically includes an application server, the operating system and a set of external systems (e.g., databases, payment gateways, etc). The Simple Object Access Protocol (SOAP) is used for exchanging XML-based messages between the consumer and the provider over the network (using for example http or https protocols). Typically, in each interaction the consumer (client) sends a request SOAP message to the provider (the server). After processing the request, the server sends a response message to the client with the results. Web-services interfaces are described using WSDL (Web-Services Definition Language) [7], which is a XML format used to generate server and client code, and for configuration. A broker is used to enable applications to find Web-services."

VIEIRA, Marco; LARANJEIRO, Nuno; MADEIRA, Henrique. Assessing robustness of web-services infrastructures. In: 37th Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN'07). IEEE, 2007. p. 131-136.

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Optimization has a fairly small place in Holland's work on adaptive systems, yet the majority of research on GAs tends to assume this is their purpose. De Jong, who initiated this interest in optimization, has cautioned that this emphasis may be misplaced in a paper [7] in which he contends that GAs are not really function optimizers, and that this is in some ways incidental to the main theme of adaptation. Nevertheless, using GAs for optimization is very popular, and frequently successful in real applications, and to those interested in metaheuristics, it will undoubtedly be the viewpoint that is most useful.

REEVES, Colin. Genetic algorithms. In: **Handbook of metaheuristics**. Springer US, 2003. p. 55-82. <https://www.researchgate.net/>