Design and Implementation of
a Cloud Computing Portal for G-BLAST

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Abstract. The G-BLAST Framework proposed by Yang et al. is a grid-based solution for mpiBLAST to perform genomic sequence alignments [1]. In this paper, we implement Yang's method on Cloud Computing. Since not everyone has expertise in computer technology and understands Cloud Computing well, people in disciplines other than computer science such as bioinformatics might hesitate or give up applying Cloud Computing technology on their research. In view of this, we aim to build a friendly portal to allow people to perform genomic sequence alignments at ease by a few clicks on the mouse.

Keywords: G-BLAST Framework, cluster, cloud computing, portal

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