EDITOR-IN-CHIEF'S INTRODUCTION

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This issue marks the third year of existence of the *African Journal of Computing & ICT*. It is a combined issue containing both the first and second edition of Volume 3.

This volume contains four (4) papers which are on information retrieval system, foundations of computer science/discrete structures and numerical computation.

In his paper entitled, "Comparative Study of Some Popular Web Search Engines", Dr. Olalekan Akinola evaluated the effectiveness of 5 popular search engines (namely, Google, MSN, Alta Vista, 37.com and Yahoo) by using a list of 15 computer science-related keywords/queries. It was established, among others, that Google has the highest document retrieval efficiency (in terms of the total number of documents retrieved), followed by Yahoo, Alta Vista, MSN and 37.com. This result confirms the earlier results obtained by Griesbaum (2004), and Hananzita and Kiran (2006). The paper also confirmed the result of Hong and David (2007) to the effect that Google always takes a very small time to retrieve a document.

Prof. 'Dele Oluwade's paper on 'The Galois Group of the Chebyshev Polynomials of the First Kind of Prime Degree' is a study on the Galois group theoretical structure of the Chebyshev Polynomials of the first kind of prime degree. The Galois group is a discrete structure which arises from the Galois theory of equations propounded by the famous French scientist Evariste Galois (1811-1832). This group provides a connection between the algebraic theory of fields and group theory. By first finding the splitting field of the polynomials over the set of rational numbers, the author showed that the Galois group of the polynomials is isomorphic to the cyclic group of order two.

The paper by Dr. O.A. Taiwo and A.K. Bello dwelt on the numerical solution of boundary value problems via Patched Segmented Collocation Method in which the whole intervals of consideration have been partitioned into various subintervals. In the paper, the solutions are first sought in the various subintervals and thereafter matched together using Chebyshev Polynomials as the basis function. By using numerical examples, the authors established the efficiency and accuracy of the method, demonstrating that the results obtained are better than when problems are solved within the whole intervals.

In 'A Note on the Algebra of Qualitative Equivalence of Ordinary Differential Equations', Prof. 'Dele Oluwade presented an exposition on the notion of qualitative equivalence of ordinary differential equations. This is a concept which assists in describing the behavior of an equation without necessarily drawing the solution curves of the equation. Qualitative equivalence of a set of differential equations naturally leads to the generation of the qualitative classes of the set, which is a discrete structure. In the paper, the author generated the qualitative classes of a simple example of a set of first order autonomous ordinary differential equations. Practical areas of application of the concept of qualitative equivalence include computer networking, fractals and coding theory.