

Small-world networks

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The world is large, but most of us at some point have randomly met someone with a friend in common, giving the feeling that we live in a small world. This notion of a small world phenomenon is not new; in the 1960s, psychologist Stanley Milgram experimentally tested these short path social connections in what later became well-known as six degrees of separation. Later, Watts and Strogatz formalized this idea in a small world random graph model that became a major contribution to network science. Applications of their proposed model have reached many fields such as epidemiology, neuroscience, and sociology. This talk will cover Milgram's experiment, the network generation model proposed by Watts and Strogatz and its structural properties, and real-life applications.