1023-F5-1008 Robert J McDevitt\* (robert.mcdevitt@navy.mil), 17320 Dahlgren Road, Dahlgren, VA 22448. A Matlab GUI for teaching Cryptography and Cryptanalysis.

Teaching cryptology and cryptanalysis without an automated tool for classroom demonstrations restricts the instructors ability to adequately demonstrate concepts with messages that approximate the length of real world messages. Likewise, without an automated tool, student homeworks tend to be either unrealistically short, or tedious in the amount of repetitive calculation.

I developed a graphical user interface (GUI) in MATLAB which automates the routine computations, and allows the instructor to concentrate on the concepts involved. This presentation will demonstrate the capabilities of the GUI and provide interested parties the opportunity to obtain the source code free of charge. (Received September 24, 2006)