

An Introduction to the Mumps Language

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The Mumps (*Massachusetts General Hospital Utility Multi-programming System*) computer language was developed by Neil Pappalardo (founder of Meditech) and others at MGH in the late 60s. It rapidly became popular for medical applications and was ported to many platforms. Currently, there are several commercial and open source versions available. Mumps is widely used in embedded financial and clinical systems and is the basis of the U.S. Veterans Administration's computerized medical record system known as VistA (*Veterans Health Information Systems and Technology Architecture*), the largest of its kind. The main feature peculiar to Mumps is its multi-dimensional and hierarchical database facility. In Mumps, databases are organized as trees whose nodes are addressed by path descriptions in a manner which is easy for a novice programmer to master in a relatively short time. The talk will cover the basics of the language and some quick programming demonstrations.

Free copies of Mumps interpreters/compiler are available for download at:

1. Intersystems (*alias: Caché*): <http://www.intersystems.com/library/software-downloads>
2. FIS (GT.M): <http://www.fisglobal.com/products-technologyplatforms-gtm>
3. Ray Newman's Mumps: <http://sourceforge.net/projects/mumps>
4. GPL Mumps: <http://www.cs.uni.edu/~okane>¹

More Free Stuff: PDF copies of the slides and a Mumps language textbook will be provided.

Dr. O'Kane is former professor and head of Computer Science at the University of Northern Iowa and, prior to that, professor and head of Computer Science at the University of Alabama. He also taught at the University of Tennessee and the Ohio State University College of Medicine. He is the author of nearly 50 publications in the areas of information retrieval and medical informatics. He received his S.B. in chemistry from Boston College and his Ph.D. in computer science from the Pennsylvania State University. He is the author of a Mumps based open source IS&R workbench, and an open source compiler/interpreter for the Mumps language.

1. Note: designed for Linux but will work with Windows if Cygwin is installed (See Users' Guide). Linux is preferred - try Oracle's VBOX with Linux Mint Mate 17 installed.