

## **BIOGRAPHICAL SKETCH**

David Q. Mertz, Ph.D.

I am currently an independent writer and researcher. The topics I address in my widely read columns and book typically fall at a midpoint between theoretical computer science and practical programming tips. Much of this writing contains original research results in areas including statistical text modeling, compression techniques, security and cryptography, and algorithms.

### **Educational Background**

University of Colorado at Boulder.

- Bachelor of Arts, December 1987.
- Graduation with Honors: Honors Thesis directed by Professor Steve Fuller.

University of Massachusetts at Amherst, Department of Philosophy.

- Master of Arts, May 1991.
- Doctorate, September 1999. Dissertation under direction of Professor Ann Ferguson.
- Puryear Fellowship, Philosophy Department, 1988-1989 Academic Year.
- Graduate School Fellowship, 1989-1990 Academic Year.

### **Academic Appointments**

North Adams State College, Visiting Lecturer, 1994.

University of Massachusetts, Instructor, 1994 (intersession).

University of Hartford, Visiting Assistant Professor, 1993

Various Research and Teaching Assistantships at University of Massachusetts.

### **Other Germane Work Experience**

Gnosis Software, Inc., Founder and Lead Developer. 1998 through the present. As well as its publication role, Gnosis Software maintains and contributes to many Open Source software projects, including the Python package *Gnosis Utilities* that is utilized by the EVM2003 (Electronic Voting Machine) project.

From 1995 through 1999 served as Senior/Lead Programmer at several partnered private companies producing software designed to assure regulatory compliance with insurance and financial laws, particularly in areas of licensing and certification.

### **Publications**

I have published extensively in several unrelated—or loosely related—areas:

- APPLIED PROGRAMMING AND COMPUTER SCIENCE. I write many of the most widely read articles on the Python programming language in my IBM developerWorks column *Charming Python* and elsewhere; I also address XML-related topics in a column. Selected publications include:

David Mertz, *Text Processing in Python*, Addison Wesley, 2003. ISBN: 0-321-11254-7.

David Mertz, "Compression and Streaming of XML Documents: The Entropy of Documents," Intel

Developer Network, 2001. <[http://gnosis.cx/publish/programming/xml\\_compression.html](http://gnosis.cx/publish/programming/xml_compression.html)>.

David Mertz, "Optimizing xml2struct Processing for Embedded Applications," Intel Developer Network, 2001. <[http://gnosis.cx/publish/programming/xml\\_compression\\_2.html](http://gnosis.cx/publish/programming/xml_compression_2.html)>.

David Mertz, "A Data Compression Primer," IBM developerWorks, 2000. <[http://gnosis.cx/publish/programming/compression\\_primer.html](http://gnosis.cx/publish/programming/compression_primer.html)>

David Mertz, Tutorial Series on Cryptology Concept, IBM developerWorks, 2001.

- a. "Introduction to Cryptology Concepts I" <<http://gnosis.cx/publish/programming/cryptology1.pdf>>
- b. "Introduction to Cryptology Concepts II" <<http://gnosis.cx/publish/programming/cryptology2.pdf>>
- c. "Intermediate Cryptology: Specialized Protocols" <<http://gnosis.cx/publish/programming/cryptology3.pdf>>

See <<http://gnosis.cx/publish/>> for several hundred additional publications.

- POLITICAL PHILOSOPHY, ETHICS, AND ECONOMICS: Full details can be found at <<http://gnosis.cx/publish/resumes/cv.html>>. A few examples include:

David Mertz, "The Net's New Enclosures," Review of Lawrence Lessig's *Code and Other Laws of Cyberspace*, for *Radical Philosophy Review*. 3(1), February 2000.

David Mertz, "The Racial Other in Nationalist Subjectivations: A Lacanian Analysis," *Rethinking Marxism* 8(2) Summer 1995.

David Mertz, "Three Economies: Hyper-real, Real, and Hidden," delivered for the Association for Economic and Social Analysis. October 5, 1993.

Udo Shüklenk and David Mertz, "Christliche Kirchen und AIDS," in *Die Lehren des Unheils*. Edited by Dahl, Edgar. Carlsen Verlag: Hamburg 1993.

- LEGAL EDUCATION: See the above referenced curriculum vitae (for example, the article for the American Bar Association's *Update* journal).

## Collaborators

Brad Hunting, University of Colorado, Department of Computer Science and Department of Mathematics (Co-author on articles about IP multicasting and quantum computing).

Michele Simionato, University of Pittsburg, Department of Physics. (Co-author on articles about metaprogramming).

Boudewijn Rempt, Tryllian, Amsterdam. (Co-author on articles about distributed computing and GUI libraries).

Andrew Blais, Anna Maria College, Department of Philosophy (Co-author on articles about neural networks and PalmOS programming)

Frank McIngvale, Huntsville, AL (Co-author of the module *gnosis.xml.pickle* which is part of *Gnosis Utilities*).

Ann Ferguson, University of Massachusetts, Department of Philosophy and Department of Womens Studies (Directed my disseration).