

Books Published by David Mertz, Ph.D.

Regular Expressions, AI Code Assistants, and Puzzling Thoughts: Deep Fakes in the Chomsky Hierarchy. Manning Publications, 2023 (forthcoming).

The Puzzling Quirks of Regular Expressions. Lulu Press (August 2021). ISBN 978-1312160743.

Cleaning Data for Effective Data Science: Doing the Other 80% of the Work, Packt Publishing (March 2021). ISBN 978-1801071291.

Functional Programming in Python. O'Reilly Media (May 2015). ISBN 9781491928554.

From `future` import Python: Picking a Python Version—A Manifesto. O'Reilly Media (April 2015). ISBN 978-1491926963.

Text Processing in Python. Addison-Wesley Professional (June 2003). ISBN 978-0321112545)

Articles Published by David Mertz, Ph.D.

"Code and Design Evaluation of GNUMed." GNU Project (open source). August 2010.

"Cyborg" (entry), in International Encyclopedia of Communication. Wiley-Blackwell. ISBN 978-1-405-13199-5 (2008).

"Privacy Issues in an Electronic Voting Machine," in Katherine J. Strandburg and Daniela Stan Raicu, Privacy and Technologies of Identity: A Cross-Disciplinary Conversation. New York: Springer Science+Business Media. ISBN 0387260501. Coauthored with Arthur M. Keller, Joseph Lorenzo Hall, and Arnold Urken (2006).

"A Voting System with a Modular Voting Architecture and an Electronic Audit Trail," Threat Analyses for Voting System Categories: A Workshop on Rating Voting Methods (VSRW 06), John Kelsey and Poorvi Vora, eds., Washington DC, June 8-9, 2006. Coauthored with Arthur M. Keller, Alan Dechert, Karl Auerbach, and Amy Pearl.

XLM Matters. "MochiKit: Lift up your DOM manipulation of XML." IBM developerWorks. August 2006.

"2006 O'Reilly Open Source Convention: A Foray into Journalism." IBM developerWorks. July 2006.

Charming Python. "Decorators make magic easy: A look at the newest Python facility for meta-programming." IBM developerWorks. June 2006.

Charming Python. "Python Elegance, Python Warts, Part 2: Properties, attributes, methods and custom access." IBM developerWorks. June 2006.

Charming Python. "Python Elegance, Python Warts: Sequences and comparisons." IBM developerWorks. May 2006.

Charming Python. "Hatching Eggs: A PEAK at improved installation and package management." IBM developerWorks. May 2006.

Multiple documents for "Tutorial for Linux Professional Institute 102 Exam." IBM Certification Exam Tool. September 2005–April 2006.

- Topic 205: Network Configuration
- Topic 206: Mail and News
- Topic 207: Domain Name System (DNS)
- Topic 208: Web Services
- Topic 210: Network Client Management
- Topic 212: System Security
- Topic 214: Network Troubleshooting

"Metaclass programming in Python, Part 3: Cleverness considered harmful (Or, how to do metaprogramming without metaclasses)." IBM developerWorks. July 2005. Co-authored with Michele Simionato Ph.D.

Multiple documents for "Tutorial for Linux Professional Institute 101 Exam." IBM Certification Exam Tool. July-August 2005.

- Topic 201: Understanding the Linux Kernel
- Topic 202: Understanding System Startup
- Topic 203: Understanding Filesystems
- Topic 204: Working with Hardware (with Brad Huntting)
- Topic 209: File Sharing Servers
- Topic 211: System Maintenance
- Topic 213: System Customization and Automation
- Topic 214: Troubleshooting (with Brad Huntting)

"Programming IP Sockets on Linux, Part Two." IBM developerWorks (Linux Zone Feature). May 2005.

Charming Python. "A New PEAK: Generic functions and predicative dispatch." IBM developerWorks. April 2005.

"Programming IP Sockets on Linux, Part One." IBM developerWorks (Linux Zone Feature). March 2005.

XLM Matters. "Scalable Vector Graphics: Flexible and portable XML language for graphics." IBM developerWorks. March 2005.

"The R Programming Language (part 3): Reusable and Object Oriented Programming." IBM developerWorks (Linux Zone Feature). March 2005.

XLM Matters. "Getting the most out of gnosis.xml.objectify: Using utility functions for enhanced object behavior." IBM developerWorks. November 2004.

"Review of Steve Martinot's The Rule of Racialization, for Socialism and Democracy. 18(1) November 2004.

Charming Python. "Pyrex: Writing C code in Python syntax." IBM developerWorks. October 2004.

XLM Matters. "OASIS Election Markup Language: Standardization of XML Formats for Voting and Elections." IBM developerWorks. September 2004.

"The R Programming Language (part 2): Functional Programming and Data Explorations." IBM developerWorks (Linux Zone Feature). August 2004. Co-authored with Brad Huntting.

XLM Matters. "The Dublin Core Metadata Initiative: Describing XML Content with DCMI." IBM developerWorks. July 2004.

"The R Programming Language: Dabbling with a wealth of statistical facilities." IBM developerWorks (Linux Zone Feature). July 2004. Co-authored with Brad Huntting.

Charming Python. "DParser for Python: Exploring Another Python Parser." IBM

developerWorks. June 2004.

Charming Python. "The Natural Language Toolkit: Using Python in Computational Linguistics." IBM developerWorks. June 2004.

XLM Matters. "EVM2003 and XML: Practical XML data design and manipulation for voting systems." IBM developerWorks. May 2004.

XLM Matters. "GUIs and XML Configuration Data: The Mozilla Project and XUL." IBM developerWorks. May 2004.

XLM Matters. "GUIs and XML Configuration Data: A look at the use of XML in MacOSX and KDE." IBM developerWorks. April 2004.

Charming Python. "The Python Enterprise Application Kit: A first look at protocols in Python." IBM developerWorks. March 2004.

Charming Python. "Testing Frameworks in Python: Making sure your software does what you think it does." IBM developerWorks. March 2004.

XLM Matters. "XML For Word Processors: Open source embraces XML as native document format." IBM developerWorks. February 2004.

"Linux on PowerPC Processors: Your favorite operating system isn't only for x86." IBM developerWorks (Linux Zone Feature). January 2004.

"Regina and NetRexx: Scripting with Free Software Rexx Implementations." IBM developerWorks (Linux Zone Feature). January 2004.

Charming Python. "Review of Python IDEs.." IBM developerWorks. November 2003.

XLM Matters. "The XOM Java XML API A rigorously correct tree-oriented XML model." IBM developerWorks. November 2003.

XLM Matters. "SXML And SSAX: Manipulating XML in the Scheme Programming Language." IBM developerWorks. October 2003.

Charming Python. "Numerical Python: Working with the numeric and numarray packages." IBM developerWorks. September 2003.

"The Twisted Matrix Framework: Part Four: Secure Clients and Servers." IBM developerWorks (Linux Zone Feature). August 2003.

XLM Matters. "The Text Encoding Initiative: An XML Dialect for Archival and Complex Documents." IBM developerWorks. August 2003.

"Installing FreeBSD (tutorial)." IBM developerWorks. July 2003.

"Metaclass Programming in Python, Part 2: Understanding the Arcana of Inheritance and Instance Creation." IBM developerWorks, June 2003. Co-authored with Michele Simionato, Ph.D.

"The Twisted Matrix Framework: Part Three: Stateful Web Servers and Templating." IBM developerWorks (Linux Zone Feature). June 2003.

"The Twisted Matrix Framework: Part Two: Implementing Web Servers." IBM developerWorks (Linux Zone Feature). June 2003.

XLM Matters. "The ElementTree API: Another Native Python Approach to XML." IBM developerWorks. June 2003.

XLM Matters. "The RXP Parser: An extremely fast validating parser with a Python binding." IBM developerWorks. June 2003.

"The Twisted Matrix Framework: Part One, Understanding Asynchronous Networking." IBM developerWorks (Linux Zone Feature). May 2003.

"Asynchronous SAX: Simple API for XML as a Long-Running Event Processor." IBM developerWorks (XLM Zone Tip). May 2003.

XLM Matters. "RELAX NG Forms: Compact Syntax and XML Syntax." IBM developerWorks. May 2003.

"Make your CGI scripts available via XML-RPC: Providing a programmatic interface to web services." IBM developerWorks (XLM Zone Tip). April 2003.

"Command-line XML Processing: Working with XML Documents from the Shell." IBM developerWorks (XLM Zone Tip). April 2003.

Charming Python. "The itertools module: Functional programming in Python becomes lazy." IBM developerWorks. April 2003.

"Multicasting Strategies: Understanding Reliability." Intel Developer Services. March 2003. Co-authored with Brad Huntting.

"Multicasting Strategies: Protocols and Topologies." Intel Developer Services. March 2003. Co-authored with Brad Huntting.

"An Introduction to Multicasting Strategies." Intel Developer Services. March 2003. Co-authored with Brad Huntting.

Charming Python. "Multiple Dispatch: Generalizing Polymorphism with Multimethods." IBM developerWorks. February 2003.

XLM Matters. "Relax NG: Doing Better than W3C XML Schemas." IBM developerWorks. January 2003.

XLM Matters. "More On Relax NG: Tools and Special Issues." IBM developerWorks. January 2003.

Charming Python. "Declarative Mini-Languages: Programming as assertion rather than instruction." IBM developerWorks. December 2002.

XLM Matters. "reStructuredText: A Light, Powerful Document Markup." IBM

developerWorks. December 2002.

"Metaclass Programming in Python: Pushing Object Oriented Programming to the Next Level." IBM developerWorks. December 2002. Co-authored with Michele Simionato, Ph.D.

Charming Python. "The SimPy Simulation Language: Modelling Discrete Simultaneous Events." IBM developerWorks. October 2002.

XLM Matters. "Yet another better XML: YAML Ain't Markup Language." IBM developerWorks. October 2002.

"Using CSS2 to display XML documents: A less 'expensive' alternative to XSLT." IBM developerWorks (XML Zone Tip). September 2002.

Charming Python. "Making Python Run as Fast as C: Psyco - The Python Specializing Compiler." IBM developerWorks. August 2002.

XLM Matters. "Roundup of XML Editors: Java and MacOS." IBM developerWorks. August 2002.

XLM Matters. "Roundup of XML Editors: Windows." IBM developerWorks. August 2002.

Distributing Computing. "Cooperative Computing with Mobile Agents." Intel Developer Services. July 2002. Co-authored with Boudewijn Rempt

Distributing Computing. "Cross-language remote invocation with XML-RPC." Intel Developer Services. June 2002.

Distributing Computing. "Introduction to Python Remote Objects (Pyro)." Intel Developer Services. April 2002.

Distributing Computing. "Introduction to remote program logic under Python." Intel Developer Services. April 2002.

"Lightweight XML Libraries: The KISS Principle." IBM developerWorks (XML Zone Tip). March 2002.

XLM Matters. "Squeezing OOP data into XML rules: The gnosis.xml.validity Library." IBM developerWorks. May 2002.

XLM Matters. "More on XML and Compression: Block-Level Algorithms and Resource Loads." IBM developerWorks. February 2002.

Charming Python. "Implementing "weightless threads" with Python generators." IBM developerWorks. February 2002.

"XML Programming Paradigms (part five): Miscellaneous special approaches to XML processing." Intel Developer Services. January 2002.

"XML Programming Paradigms (part four): Functional Programming approaches

to XML processing." Intel Developer Services. January 2002.

Charming Python. "Generator-based State Machines and Coroutines." IBM developerWorks. January 2002.

XLM Matters. "PYX: A Line-Oriented XML." IBM developerWorks. January 2002.

XLM Matters. "REXML: XML Processing in the Ruby Programming Language." IBM developerWorks. January 2002.

"The GNU Text Utilities (tutorial)." IBM developerWorks (Linux Zone Feature). January 2002.

"Intermediate Cryptology: Specialized Protocols." IBM developerWorks (Linux Zone Feature). December 2001.

Charming Python. "Parsing in Python with Spark." IBM developerWorks. December 2001.

Charming Python. "Parsing in Python with SimpleParse." IBM developerWorks. December 2001.

"XML Programming Paradigms (part three): Declarative Programming with XML Stylesheet Language Transformations." Intel Developer Services. December 2001.

Charming Python. "Book Roundup, Part 3." IBM developerWorks. November 2001.

XLM Matters. "XML-RPC as Object Model: A Data Bundle for the Hoi Polloi?" IBM developerWorks. November 2001.

"Introduction to Cryptology Concepts II." IBM developerWorks (Linux Zone Feature). November 2001.

Charming Python. "Book Roundup, Part 2." IBM developerWorks. November 2001.

"XML Programming Paradigms (part two): Event Driven Programming with the Simple API for XML." Intel Developer Services. November 2001.

"XML Programming Paradigms (part one): Object Oriented Programming with the Document Object Model." Intel Developer Services. November 2001.

XLM Matters. "More on XML in Python: The 4Suite XML Tools." IBM developerWorks. October 2001.

"Introduction to Cryptology Concepts I." IBM developerWorks (Linux Zone Feature). October 2001.

Charming Python. "Anygui: The universal graphical Python interface to come." IBM developerWorks. October 2001.

"The 'txt2dw' utility: Writing developerWorks content the easy way." IBM developerWorks. October 2001.

"Subelement contents versus tag attributes: Design issues in XML formats." IBM developerWorks (XLM Zone Tip). October 2001.

XLM Matters. "Those awkward limits of DOM, SAX and XSLT: The HaXml functional programming model for XML." IBM developerWorks. September 2001.

Charming Python. "Iterators and Simple Generators." IBM developerWorks. September 2001.

XLM Matters. "XML and Compression: Exploring the entropy of documents." IBM developerWorks. August 2001.

"Optimizing xml2struct Processing for Embedded Applications." Intel Developer Network. June 2001.

"An introduction to neural networks: Pattern learning with back-propagation." IBM developerWorks. June 2001. Co-authored with Andrew Blais, Ph.D.

Charming Python. "Even More Functional Programming in Python." IBM developerWorks. June 2001.

Charming Python. "PyDoc and distutils: Improving the Social Infrastructure of Python." IBM developerWorks. June 2001.

"An Introduction to Quantum Computing: A Guide to Solving Intractable Problems Simply." IBM developerWorks (Linux Zone Feature). June 2001. Co-authored with Brad Huntting.

"PalmOS Hosted Programming Languages: Using the Palm as a Development Environment." IBM developerWorks. June 2001. Co-authored with Andrew Blais, Ph.D.

Charming Python. "Review of Python IDEs." IBM developerWorks. June 2001.

Charming Python. "Revisiting XML Tools for Python." IBM developerWorks. May 2001.

"Understanding ebXML: Untangling the Future Business Web." IBM developerWorks (XML Zone Tip). May 2001.

XLM Matters. "Lessons in Open Source and Common Sense: Revisiting xml\_pickle and xml\_objectify." IBM developerWorks. May 2001.

XLM Matters. "The xml2sql Module: Generating SQL Statements from DTDs and XML Documents." IBM developerWorks. May 2001.

"Web Development with BeOS (R5): Diamonds in the Rough." IBM developerWorks. April 2001.

XLM Matters. "An Indexer for XML Documents." IBM developerWorks. April 2001.

"Compression and Streaming of XML Documents: The Entropy of Documents."



Intel Developer Network. April 2001.

Charming Python. "More Functional Programming in Python." IBM developerWorks. March 2001.

XLM Matters. "XML and Data Models: Hierarchical, Relational and Object-Oriented." IBM developerWorks. March 2001.

XLM Matters. "Generating DTDs and XML Documents from SQL Queries." IBM developerWorks. March 2001.

"Beginning with the Haskell Programming Language (tutorial)." IBM developerWorks. March 2001.

Charming Python. "Developing a Full-Text Indexer in Python." IBM developerWorks. February 2001.

"Understanding Unicode." IBM developerWorks (Technical Tip). February 2001.

Charming Python. "Text processing in Python with mxTextTools: Advanced Tips" IBM developerWorks. January 2001.

XLM Matters. "Roundup of XML Editors." IBM developerWorks. January 2001.

XLM Matters. "Comparing W3C XML Schemas and Document Type Definitions (DTDs)." IBM developerWorks. January 2001.

Charming Python. "Functional Programming in Python." IBM developerWorks. January 2001.

Charming Python. "Book Roundup." IBM developerWorks. January 2001.

Charming Python. "What's New in Python 2.0?" IBM developerWorks. January 2001.

XLM Matters. "Getting Comfortable with the DocBook XML Dialect." IBM developerWorks. October 2000.

XLM Matters. "Transforming DocBook Documents Using XSLT." IBM developerWorks. October 2000

Charming Python. "Interviews with Developers of JPython and Python for .NET." IBM developerWorks. October 2000.

Charming Python. "TK programming in Python: Tips for Beginners." IBM developerWorks. October 2000.

Charming Python. "Interviews with Creators of Vyper and Stackless Python." IBM developerWorks. September 2000.

Charming Python. "Dynamically reloading modules in long-running processes." IBM developerWorks. September 2000.

XML Matters. "Getting Started with the DocBook XML Dialect." IBM developerWorks. September 2000.

"Making websites more accessible to persons with disabilities (part II)." IBM developerWorks (Technical Tips). August 2000.

"Making websites more accessible to persons with disabilities (part I)." IBM developerWorks (Technical Tips). August 2000.

XML Matters. "On the Pythonic Treatment of XML Documents As Objects (I. xml\_pickle)." IBM developerWorks. August 2000.

XML Matters. "On the Pythonic Treatment of XML Documents As Objects (II. xml\_objectify)." IBM developerWorks. August 2000.

Charming Python. "Curses programming in Python: Tips for Beginners." IBM developerWorks. July 2000.

Charming Python. "Text Processing in Python: Tips for Beginners." IBM developerWorks. June 2000.

Charming Python. "State Machines: Algorithms and programming approaches in Python." IBM developerWorks. June 2000.

Charming Python. "My first web-based filtering proxy." IBM developerWorks. June 2000.

"Short Product Review of Programming/Code Editors." Webreview.com (Dr. Dobbs Journal). June 2000–January 2001.

- Five minutes to a Python CGI
- Review of Boxer 99
- Review of FTE (Folding Text Editor)
- Review of PFE (Programmers' File Editor)
- Review of NEdit
- Review of TextPad
- Review of jEdit
- Review of XML Instance 1.1
- Review of XML Spy 3.0
- Review of XMetal 2.0
- Review of Idle 0.6
- Review of PythonWorks Pro 1.2
- Review of Perl Builder
- Review of HTMLPP ("The HTML Preprocessor")
- Review of PPWizard (HTML Preprocessor)

Charming Python. "A Closer Look at Python's xml.dom Module." IBM developerWorks. May 2000.

Charming Python. "An Introduction to XML Tools for Python." IBM

developerWorks. May 2000.

"A Harbour Project How-To: A gentle introduction to an open-source implementation of the Clipper language." IBM developerWorks (Linux Zone Feature). April 2000.

"Adding Introspection And Object Persistence To Xbase++." IBM developerWorks. April 2000.

"A Data Compression Primer." IBM developerWorks (Linux Zone Feature). April 2000.

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

Review of Renata Salecl's (Per)Versions of Love and Hate, for Red Pepper. June, 1999.

"Women and AIDS: The Ethics of Exaggerated Harm (reprint)," Monash Bioethics Review. 16(2) April 1997.

"Sex Wars: The New Left's AIDS-related Scientism." Rethinking Marxism. 9(1), Spring 1996/1997.

"Women and AIDS: The Ethics of Exaggerated Harm." Bioethics. 10(2), April, 1996. Primary Author. Coauthored with Mary Ann Sushinsky and Udo Schüklenk.

"Student Forum-Proposed Federal Gun-Control Amendment." Update on Law-Related Education. 19(3), Fall 1995. American Bar Association Special Committee on Youth Education for Citizenship. Coauthored with Gayle Mertz.

"The Bioethics Tabloids: How professional ethicists have fallen for the myth of heterosexual AIDS." Health Care Analysis. 3(1), 1995. Coauthored with Udo Schüklenk and Juliet Ricther.

"Review of Slavoj Žižek's Tarrying with the Negative, and Judith Butler's Bodies That Matter." Radical Philosophy Review of Books. Fall 1994.

"Review of Cornel West's Keeping Faith." Canadian Philosophical Reviews. 14(4) August 1994.

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

"Cyborg Bodies from Haraway to Bataille: Two Ways to Lose a Self." Alterity, Excess, Community: Strategies of Critique VII conference proceedings. York University 1993. Paper delivered in April, 1992.

"Christliche Kirchen und AIDS." coauthored with Udo Schüklenk, in Die Lehren des Unheils. Edited by Dahl, Edgar. Carlsen Verlag. Hamburg 1993. ISBN 3551850127.

"Thelma and Louise, Saturation, and The Poverty of Causality." Technologies of the Family. Edited by Alison Brown and Dianne Rothleder.

"Peer Commentary on Eric Dietrich's *Computationalism*." Social Epistemology 4(3) Fall 1990.

"Review of Kathy Acker's Empire of the Senseless." Subject 2, 1989.

"Hattiangadi's Langue-ing and Ours." Social Epistemology. 3(1) Winter 1989.

"Writing, after Bill Burroughs." The Decline 1, October 1988.

Refereed and Keynote Talks by David Mertz, Ph.D.

2022

PyCon MEA (Middle East & Africa), Dubai, *Dynamic Type Evaluation in Python*.

United Kingdom Department for International Trade, *Dynamic Type Evaluation in Python*.

PyCon APAC (Asia Pacific) and PyCon JP (Japan) 2022 Special Talk Event, *Encrypting Tulips in the Modern Prestige Society*.

2021

Gitex Global x AI Everything 2021, Keynote: *The Future History of Generative Adversarial Networks*.

2019

PiterPy 2019, *Interview with PiterPy Organizer*.

PiterPy 2019, *An Introduction to Generative Adversarial Networks with PyTorch*.

2017

PyData Seattle 2017, *Tutorial: Parallelizing Scientific Python with Dask, with Jim Christ*.

2016

Encuentro Social de Desarrolladores (Cuba), *Functional Programming in Python*.

Conferencia Internacional de Software Libre 2016 (Cuba), *Reflections on teaching Python to working scientists*.

PyCon 2016 (Education Summit), *Reflections on teaching Python to working scientists*.

PyData SF 2016, *Keynote Address: Working Efficiently with Big Data in Text Formats*.

2015

PyCon Belarus 2015, *Keynote Address: Python's (future) type annotation system(s)*.

2014

PyCon-ZA 2014, *Keynote Address: What I learned about Python – and about Guido's time machine – by reading the python-ideas mailing list.*

Los Angeles Professional Python Users Group, *PyPy-STM.*

2013

PyCon 2013, *Why you should use Python 3 for text processing.*

PyCon-UK 2013, *Keynote Address: What I learned about Python – and about Guido's time machine – by reading the python-ideas mailing list.*

2012

PyCon 2012, *Coroutines, event loops, and the history of Python generators.*

OSCon 2012, *US Patriot Act and implications for Cloud Computing & Data Privacy.*

PyCon-India 2012, *Keynote Address: A verifiable election system.*

2010

Pycon 2010, *Maximize your program's laziness.*

2007

OSCon 2007, *Open Source Voting (revisited).*

2006

OSCon 2006, *Open Source Voting.*

1996

Politics and Languages of Contemporary Marxism, *Two Lacans and the Immanent Negativity of Gender.*

1995

Eastern Division American Philosophical Association Conference  
*Commentary on Richard White's "The Future of Romantic Love.* (Society for the Philosophy of Sex and Love session)

Marxism and the Politics of Anti-Essentialism, *Cyborg Bodies Revisited: The Poststructuralist Remedy to Postmodernism.*

1994

Radical Philosophy Association First National Conference, *Sex Wars: The New Left's AIDS-related Scientism.* (Panel: AIDS and the Genealogy of New Modes of Social Regulation).

Society of Women in Philosophy Eastern Division, *Transgression, Deviance and Knowledge*.

1993

Association for Economic and Social Analysis, *Three Economies: Hyper-real, Real, and Hidden*.

1992

Marxism in the New World Order Conference, *Some Remarks on Racism and Nationalism*.

University of Massachusetts Forum for Gay, Lesbian, and Bisexual Concerns, *Sexual Epistemology: Everything You Always Pretended to Know about Sex*.

1991

Fifth Annual Lesbian and Gay Studies Conference, Rutgers University, *Are There Any Lesbians in the Film Henry and June?*

1989

Umass Philosophy Alternative Track Spring Dissertation Workshop, *Epistemology*. (Commentary by Steve Fuller, Virginia Polytechnic University).