

INFO 6210

Data Management and Database Design

Books

Books

Required text (All free online)

Some textbooks are all available for free to NEU students via SpringerLink (<http://link.springer.com/>). You must access SpringerLink from an NEU IP address to have full access and/or download these books.

If you are off-campus, in order to access resources provided through the Northeastern library outside the network, you should use their bookmarklet to load any page through the proxy:

<http://library.northeastern.edu/bookmarklet>

Required Texts

The required textbooks we will be using in this class are:

Database Systems A Pragmatic Approach (2014) (This will be the primary book)

Authors: Elvis C. Foster, Shripad V. Godbole

ISBN: 978-1-4842-0878-6 (Print) 978-1-4842-0877-9 (Online)

<http://link.springer.com/book/10.1007/978-1-4842-0877-9>

Principles of Distributed Database Systems, Third Edition (2011)

Authors: M. Tamer Özsu, Patrick Valduriez

ISBN: 978-1-4419-8833-1 (Print) 978-1-4419-8834-8 (Online)

<http://link.springer.com/book/10.1007/978-1-4419-8834-8>

Beginning Database Design from Novice to Professional (2012)

Authors: Clare Churcher

ISBN: 978-1-4302-4209-3 (Print) 978-1-4302-4210-9 (Online)

<http://link.springer.com/book/10.1007/978-1-4302-4210-9>

Beginning PHP and MySQL (2010)

From Novice to Professional

W. Jason Gilmore

<https://link.springer.com/book/10.1007/978-1-4302-3115-8>

PHP and MySQL Recipes A Problem-Solution Approach (2016)

Frank M. Kromann
<https://link.springer.com/book/10.1007/978-1-4842-0605-8>

Expert MySQL (2012)
Charles Bell
<https://link.springer.com/book/10.1007/978-1-4302-4660-2>

SQL on Big Data - Technology, Architecture, and Innovation (2016)
Sumit Pal
<https://link.springer.com/book/10.1007/978-1-4842-2247-8>

The Definitive Guide to MongoDB: A complete guide to dealing with Big Data using MongoDB (2015)
Authors: David Hows, Peter Membrey, Eelco Plugge, Tim Hawkins
ISBN: 978-1-4842-1183-0 (Print) 978-1-4842-1182-3 (Online)
<http://link.springer.com/book/10.1007/978-1-4842-1182-3>

MongoDB Basics (2014)
David Hows, Peter Membrey, Eelco Plugge
<https://link.springer.com/book/10.1007/978-1-4842-0895-3>

Practical MongoDB Architecting, Developing, and Administering MongoDB (2015)
Shakuntala Gupta Edward, Navin Sabharwal
<https://link.springer.com/book/10.1007/978-1-4842-0647-8>

Pro MongoDB Development (2015)
Deepak Vohra
<https://link.springer.com/book/10.1007/978-1-4842-1598-2>

Recommended Texts

Pro Hadoop Data Analytics
Designing and Building Big Data Systems using the Hadoop Ecosystem
Authors: Kerry Koitzsch 2017
ISBN: 978-1-4842-1909-6 (Print) 978-1-4842-1910-2
<https://link.springer.com/book/10.1007/978-1-4842-1910-2>

Pro Apache Hadoop
Authors: Sameer Wadkar, Madhu Siddalingaiah 2014
ISBN: 978-1-4302-4863-7 (Print) 978-1-4302-4864-4
<https://link.springer.com/book/10.1007/978-1-4302-4864-4>

Pro Spark Streaming
The Zen of Real-Time Analytics Using Apache Spark
Authors: Zubair Nabi 2016
ISBN: 978-1-4842-1480-0 (Print) 978-1-4842-1479-4

<https://link.springer.com/book/10.1007/978-1-4842-1479-4>

Beginning Neo4j (2015)

Authors: Chris Kemper

ISBN: 978-1-4842-1228-8 (Print) 978-1-4842-1227-1 (Online)

<http://link.springer.com/book/10.1007/978-1-4842-122>

Big Data Made Easy

A Working Guide to the Complete Hadoop Toolset

Authors: Michael Frampton 2015

ISBN: 978-1-4842-0095-7 (Print) 978-1-4842-0094-0

<https://link.springer.com/book/10.1007/978-1-4842-0094-0>

The Definitive Guide to SQLite (2010)

Authors: Grant Allen, Mike Owens

ISBN: 978-1-4302-3225-4 (Print) 978-1-4302-3226-1 (Online)

<http://link.springer.com/book/10.1007/978-1-4302-3226-1>

The Definitive Guide to MongoDB: A complete guide to dealing with Big Data using MongoDB (2015)

Authors: David Hows, Peter Membrey, Eelco Plugge, Tim Hawkins

ISBN: 978-1-4842-1183-0 (Print) 978-1-4842-1182-3 (Online)

<http://link.springer.com/book/10.1007/978-1-4842-1182-3>

Beginning CouchDB (2009)

Authors: Joe Lennon

ISBN: 978-1-4302-7237-3 (Print) 978-1-4302-7236-6 (Online)

<http://link.springer.com/book/10.1007/978-1-4302-7236-6>

Beginning Neo4j (2015)

Authors: Chris Kemper

ISBN: 978-1-4842-1228-8 (Print) 978-1-4842-1227-1 (Online)

<http://link.springer.com/book/10.1007/978-1-4842-122>

Software

PostgreSQL (<http://www.postgresql.org/>)

Windows installers - Mac OS X - Linux downloads (<http://www.postgresql.org/download/>)

sqlf and SQLite (Relational databases)

- sqlf <https://cran.r-project.org/web/packages/sqlf/sqlf.pdf>
- SQLite <https://www.sqlite.org/download.html>

Riak, Redis, and HBase (NoSQL databases)

- Riak <http://docs.basho.com/riak/kv/2.1.4/downloads/>
- Redis <http://redis.io/download>
- HBase <https://hbase.apache.org/>

MongoDB and CouchDB (NoSQL document databases)

- MongoDB <https://www.mongodb.com>
- CouchDB <http://couchdb.apache.org/>

Neo4J (graph database)

- Neo4J <https://neo4j.com/download/>

python Anaconda

- <https://www.continuum.io/anaconda-overview>

R (Statistical programming language)

- R project <https://www.r-project.org/>

RStudio (IDE)

- RStudio <https://www.rstudio.com/products/rstudio/download3/>

Python Tutorials

Dive into Python <http://diveintopython.org>

Python 101 – Beginning Python http://www.rexx.com/~dkuhlman/python_101/python_101.html

The Official Python Tutorial <http://www.python.org/doc/current/tut/tut.html>

The Python Quick Reference <http://rgruet.free.fr/PQR2.3.html>

Python Fundamentals Training – Classes <http://www.youtube.com/watch?v=rKzZEtxIX14>

Python 2.7 Tutorial Derek Banas <http://www.youtube.com/watch?v=UQi-L- chcc>

Python Programming Tutorial - thenewboston <http://www.youtube.com/watch?v=4Mf0h3HphEA>

Google Python Class <http://www.youtube.com/watch?v=tKTZoB2Vjuk>

Nice free CS/python book <https://www.cs.hmc.edu/csforall/index.html>

datacamp.com <https://www.datacamp.com/tracks/python-developer>

R Tutorials

LearnR

https://youtu.be/p3i7Kz6C_-4?list=PLFAYD0dt5xCwDNFdrqeNoU9t-nhAWkbKe

Try python @codeschool: <http://tryr.codeschool.com>

Datacamp python Tutorials

<https://www.datacamp.com/>

rstudio online learning

<https://www.rstudio.com/online-learning/>