# **CHRISTOPHER YORK**

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**PROFILE** 

Software architecture and coding for digital humanities, media, and social sciences.

**SKILLS & FOCUS** 

Multi-language and -paradigm programming. Expert: Java, Ruby, Javascript, relational databases. Professional experience: Python, Perl. Enthusiast: Haskell, Agda.

Information architecture; Data mining and analytics; GIS and data visualization.

Digital and document library technologies: SGML/XML, TEI, DocBook etc.

UNIX, git, shell and related workflows. TDD and agile methodologies.

#### **EXPERIENCE**

#### **LONDON SCHOOL OF ECONOMICS**

London, UK

#### **DATA VISUALISER**

2015—CURRENT

Design and implement data visualisations to promote data-rich social sciences research at the LSE. Javascript, D3

### **MASSACHUSETTS INSTITUTE OF TECHNOLOGY**

Cambridge, MA

# CONSULTANT, COMÉDIE FRANÇAISE REGISTERS PROJECT

2014-2016

Built software tools for in-memory data analytics and visualisation over digital humanities and social science datasets. Research into drillable infographics that combine analytics and faceted search. Javascript, Node, PostgreSQL, D3.

# **CONSULTANT, MIT HYPERSTUDIO**

2005 **—** 2010

Designed and implemented HyperStudio Repertoire, a modular toolkit for digital media projects, comprising purpose-built data models, faceted search, GIS, and flexible permissions and collaboration. Repertoire was used to implement humanities and social sciences projects at MIT on a variety of topics, including collaborative timelining and annotation; political oral history; data visualization; and non-linear documentary film. Ruby, PostgreSQL/PostGIS, Javascript, D3.

# **TUFTS UNIVERSITY**

Medford, MA

### **RESEARCHER, PERSEUS PROJECT**

2002 — 2003

Developed research tools for historians working in digital archives. Visualization and data exploration of names, dates, and places in city directories, newspapers, and police blotters. GIS and timeline tools for urban history and demography. Java, PostgreSQL/PostGIS, Javascript, Perl.

# **MASSACHUSETTS INSTITUTE OF TECHNOLOGY**

Cambridge, MA

# **TECHNICAL DIRECTOR, MIT HYPERSTUDIO**

2001 — 2002

Led a team of 4 MIT graduate software engineers in developing a Java and XML/XSLT -based content management platform for social collaboration and classwork centred around video, audio, and digital photo assets. XML markup formats and data representation for humanities text archives. Hibernate, Spring, PostgreSQL, Ant, JavaCC, and XML technologies.

# **AUSTIN INFORMATION SYSTEMS**

Austin, TX

# SOFTWARE ENGINEER (ARTIFICIAL INTELLIGENCE)

1998 — 1999

Designed and implemented a knowledge-based meta-search engine using lightweight ontologies based on WordNet. Java and Python.

EXPERIENCE (CONT'D)

CYCORP

Austin, TX

**SOFTWARE ENGINEER (ARTIFICIAL INTELLIGENCE)** 

1997 — 1998

Knowledge representation in expert systems. Implemented APIs for federation of distributed expert systems at Stanford and CYC. Research in optimising first order logic propositions, forward inference, and other logic-programming techniques. LISP, Java, and C.

**CHISHOLM TECHNOLOGIES** 

Austin, TX

1997

**SOFTWARE ENGINEER (UI)** 

GUI toolkit development in Java.

EDUCATION YALE UNIVERSITY

New Haven, CT

M.Phil History 2008; Ph.D. scheduled for submission Oct 2016

**MASSACHUSETTS INSTITUTE OF TECHNOLOGY** 

Cambridge, MA

S.M. Comparative Media Studies 2001, GPA 5.0/5.0

**CARLETON COLLEGE** 

Northfield, MN

B.A. English Literature 1995, GPA 3.84/4.00

**TEACHING** 

Teaching assistant for

Introduction to Media Studies (MIT CMS 100, Prof. Henry Jenkins, Fall '01) Shakespeare on Film (MIT 21L.435, Prof. Peter Donaldson, Spring '02)

Epidemics in Western Society since 1600 (Yale HIST 234, Prof. Frank Snowden, Spring '05)

Technical thesis supervisor for

"Indexing XML with Relational Tables," Jeffrey Yu (S.M. Computer Science, MIT '02).

"Querying Over Heterogeneous XML Schemas in a Content Management System," Fabian Morgan (S.M. Computer Science, MIT '02).

PRESENTATIONS & PUBLICATIONS

Kathleen Lossau, Erik Eilerts, and Christopher York. "Developing A Knowledge Based Index to Distributed, Disparate Data Sources," *Fifth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD-1999)*: San Diego, California.

Christopher York, Clifford Wulfman, and Greg Crane. "Structure-Aware Query for Digital Libraries: Use Cases and Challenges for the Humanities." Seventh European Conference on Research and Advanced Technology for Digital Libraries (ECDL-2003): Trondheim, Norway.

"Rich Facets, Cross-Cutting Views: Towards a New Paradigm of Resource Representation." Chicago Colloquium on Digital Humanities and Computer Science: What to Do With a Million Books. December 2-3, 2006.

"Multidimensional Data Analysis for Digital Humanities: Techniques and Tools." *Comédie Française Registers Project: NYU Colloquium and Workshop.* October 14-15, 2014.

Joint panel on accessing and visualising Digital Humanities datasets. *Comédie Française Registers Project: Paris Colloquium and Workshop.* December 14-16, 2015.

**BOOK CHAPTER** 

"Databases Considered Harmful: Data Analytics for Enlightenment Digital Humanities." Forthcoming book chapter in *Digitizing the Enlightenment*, ed Simon Burrows.

**INTERESTS** 

Programming languages and formal semantics. Type theory and proof assistants. Dependently-typed programming.