

To strengthen your research team

Thomas TRIPLET

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EDUCATION

2007 – 2009 Ph.D. in Bioinformatics.

University of Nebraska-Lincoln (NE), USA. Advisor: Dr. Peter Z. Revesz
Thesis: "Classification, Clustering and Data-Mining of biological data". GPA: 3.85/4

2004 – 2007 Master's degree and Engineer certificate in Computer Science

Grande École ENSICAEN (National Graduate School of Engineering) – Caen, France
Earned with distinctions and ranked #3 of the promotion. Minor: Image processing

2002 – 2004 Bachelor's degree in Science (*Classes Préparatoires aux Grandes Écoles*)

Lycée Chateaubriand – Rennes, France

Majors: Mathematics and Physics – Minors: Computer science, chemistry, engineering

EXPERIENCE

Since 2009 Post-doctoral Fellow

Cellulosic Biofuel Network, Concordia University, Montréal, QC, Canada
Developing an online database to facilitate the sharing and the tracking of -omics data and experimental enzymatic characterization of fungal proteins
Designing a system biology database to integrate and analyze fungal -omics data.

2007 – 2009 Research Assistant – CSE Department, University of Nebraska-Lincoln, USA

2008 Research Assistant – Biochemistry Department, University of Nebraska-Lincoln, USA
Developed a program for automatic cell tracking using computer vision techniques.

2007 – 2008 Teacher Assistant – CSE Department, University of Nebraska-Lincoln, USA
Taught C++, PHP, MySQL, HTML and CSS for the CSE156 lab course (~45 students).

Summer 2007 Linux System Administrator and Research Assistant

Bioinformatics Core Research Facility, University of Nebraska-Lincoln, USA
Designed and administrated the new website, the MySQL database and the servers.

Summer 2006 Research Assistant – Technical University of Vienna, Austria

Developed a Matlab/C program to detect and track objects in video streams in real time.
Calibrated the cameras. Improved the detection rate above 90%.

Summer 2005 I.T. Manager – Nicholas O'Dwyer Ltd, Dublin, Ireland

Administrated the network (6 servers, 90 computers) and the MS SQL database.

Since 2004 Founder and C.E.O. – Les Chevaliers Croisés, France

Managing the company. Designing embroidery patterns (188 patterns).

SKILLS

Databases *Relational:* SQL language. MySQL, PostgreSQL, MS SQL
Constraint: Datalog language, MLPQ system
Design: Merise method

Bioinformatics Genome assembly, Imaging, Markov models, “-Omics” data analysis, Sequence/Structure comparison, Phylogeny

Machine Learning *Algorithms:* SVMs, Decision trees, Bayesian classifiers, Neural nets
Reclassification: Data and Classification Integration
Computer Vision: Mean-Shift and Soft-assign algorithms. Camera calibration

Java J2SE, JSP, Applets, Servlets, JDBC, JUnit

Development *Modeling:* UML, Design-patterns
Tools: Eclipse, CVS, Tomcat
Frameworks: Hibernate

Administration Windows, Mac OS X, UNIX, Linux. AWK, PERL, shell. Cacti (SNMP tool)

Web skills Ajax, CSS, DHTML, Javascript, OWL (semantic web), PHP, RDF, RSS, XML

Other Languages C/C++, CaML, Lisp, PROLOG

Other Skills Cryptography, Compilers, Parallel and distributed systems

ACHIEVEMENTS AND HONORS

2010 Program Committee Member of the 2010 *Semantics in Data and Knowledge Bases* international workshop (SDKB 2010)

2009 *National Scholars Honor Society* member

2008 *Milton E. Mohr* fellowship in biotechnology

2008 Vice-president of the “*International Student Organization*”, UNL (since 2006)

2007 “*Beginning to make a difference*” prize awarded by the University of Nebraska

2004 Founder/C.E.O. of *Les Chevaliers Croisés*

2002 Awarded “*Approfondissement intellectuel*” (Deeper intellectual development) prize

2002 Earned 18 distinctions in high-school

LANGUAGES

English Fluent

French Native speaker

German Basics

Latin Basics (6 years in high-school)

Ancient Greek Basics (3 years in high-school)

CONFERENCES AND PUBLICATIONS

M. Shortridge, T. Triplet, P. Revesz, M. Griep, and R. Powers, **Bacterial Protein Structures Reveal Phylum Dependent Divergence**, submitted.

P. Revesz, T. Triplet, **Temporal Data Classification Using Linear Classifiers**, accepted by *Information Systems*.

T. Triplet, M. Shortridge, J. Stark, M. Griep, R. Powers and P. Revesz, **PROFESS: A Database System for PROtein Function, Evolution, Structure and Sequences**, *Database*, DOI 10.1093/database/baq011. Database 2010: baq011 (July 6, 2010).

P. Revesz, T. Triplet, **Classification Integration and Reclassification using Constraint Databases**, *Artificial Intelligence in Medicine*, vol. 49.2: 79-91 (June 2010).

P. Revesz, T. Triplet, **Temporal Data Classification using linear Classifiers**, *Proc. 13th East-European Conference on Advances in Databases and Information Systems*, Springer-Verlag, Lecture Notes in Computer Science series, vol. 5739: 347-361, Riga, Latvia (September 7-10, 2009).

T. Triplet, M. Shortridge, M. Griep, R. Powers and P. Revesz, **PROFESS: A PROtein Function, Evolution, Structure and Sequence database**, *11th International Congress on Amino Acids, Peptides and Proteins*, Vienna, Austria (August 3-7, 2009).

T. Triplet, P. Revesz, **Reclassification of Linearly Classified Data**, *5th Midwest Database Research Symposium*, Chicago, USA (October 4, 2008).

P. Revesz, T. Triplet, **Reclassification of Linearly Classified Data using Constraint Databases**, *Proc. 12th East-European Conference on Advances in Databases and Information Systems*, Springer-Verlag, Lecture Notes in Computer Science series, vol. 5207: 231-245, Pori, Finland (September 5-9, 2008).

T. Triplet, **State-of-the-art in Steganography**, *Nebraska Information Technology Security Day* (2006).