

# Yannick Gingras

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WORK      ◇ **Founder / Tech-Lead**, Digital Brewers (2009 – present)

EXPERIENCE

- Design and implement a rich Web application from front-end to backend
- Deploy and keep running an awesome Web application
- Answer all other IT needs of a young Internet startup
- **Tech. environment:** GNU/Linux, Python, TurboGears, MySQL, Mercurial
- ◇ **Senior Python Developer / Team Lead**, Pivotal Payments (2008 – 2009)
  - Analyze, design and develop scalable and reliable applications using Python
  - Design complex object-oriented solutions based on advanced software development practices and methodologies
  - Enforce and implement best practices in code refactoring, unit testing and various agile practices
  - Design and perform unit testing plans and project implementation in a free software / open-source environment
  - Provide technical training and share best practices among to development team members
  - **Tech. environment:** GNU/Linux, Python, WSGI, MySQL, MSSQL, Mercurial
- ◇ **Director of Tech Support and Sysadmin Consulting**, Savoir-faire Linux (2008)
  - Prioritize actions and dispatch personnel
  - Define implement and enforce robust and efficient procedures
  - Evaluate skill levels and plan continuing education
  - Review customers feedback and customize offering
- ◇ **GNU/Linux and Free Software Consultant**, Savoir-faire Linux (2007 – 2008)
  - Helped to scale a web application to one million users (PHP, MySQL replication, MySQL tuning, SQL optimization)
  - Lead-coder for a logistics application (Python, Pylons, SQL Alchemy, code review, Mercurial, 5 persons team)
  - Consulting on the GNU/Linux port of a multi-player FPS game server (C++, Unix development tool-chain)
  - Deployed robust spam filtering solutions (Postfix, Exim, Amavis, Spam Assassin)
  - Respond to emergencies
  - Rescue damaged data and failed systems
  - Deploy scaling solutions for both hardware and software
  - Free software modifications, deployment, integration, and support
  - Personalized training on mission critical free software
  - **Tech. environment:** GNU/Linux, Python, MySQL, Postgres, Postfix, LDAP, Samba

- WORK EXPERIENCE (CONT.)
- ◇ **System Administrator**, UQAM (2005 – 2007)
    - Web applications maintenance
    - Server software installation
    - Bioinformatics workstations setup and deployment
    - User accounts management
    - Tool customization
    - Simple grid system setup
    - Help students and researchers with technological choices
    - **Tech. environment:** GNU/Linux, Python, BLAST, Sun Grid-engine, Apache, LDAP, Samba
  - ◇ **Bioinformatics Research Assistant**, UQAM (2004 – 2007)
    - Implementation of a common intervals viewer (OpenGL, Python, Qt)
    - Implementation of a global alignment viewer (Python, Qt)
    - Implementation of a web application for common intervals presentation (Python, Twisted, XML-RPC)
    - Bayesian sequence classifier
    - Conception of a phylogenetic tree viewer (Common Lisp)
    - Port to C++ and maintenance of *Domain Teams*, a full genome scanner
    - Conception of a Web interface for genomic data presentation (Common Lisp, Python)
    - Classification of cancer cells using genomic expression profiles (R/Bioconductor)
    - **Tech. environment:** GNU/Linux, Python, C++, Common Lisp, Agile Methodology, DVCS
  - ◇ **Programmer / Developer**, Savoir-faire Linux, Montréal, Qc (2003 – 2004)
    - Lead developer for an enterprise resource planner (Python, Qt)
    - Port of the dockers dispatch application (400k lines of C++) from Novell to GNU/Linux for MEA, Port of Montréal
    - Responsible for the courses on Qt and system programming on POSIX (threads, IPC, sockets)
    - **Tech. environment:** GNU/Linux, Python, C++, MySQL, Qt, CVS
  - ◇ **Programmer / Team Leader**, Eclipsys, St-Lambert, Qc (2000 – 2002)
    - Administration of development infrastructures: CVS, backups, releases, feature freezes, etc.
    - Evaluation of technologies: languages, libraries, etc.
    - Design and implementation of a vending machine controller software (Python, C++, SQL)
    - Low level programming (sockets, threads, IPC, RPC)
    - Management of a small team (2 to 5 programmers)
    - **Tech. environment:** GNU/Linux, Python, C++, MySQL, CVS
- OTHER EXPERIENCE
- ◇ **Lead Organizer**, Montréal-Python (<http://montrealpython.org>) (2009 – present)  
*Montréal-Python is a group for local users of the Python programming language*
    - Handle the logistics of the monthly meetings: room, audio-video equipment, drinks, ...
    - Look for, motivate, and coach speakers
    - Find sponsors
    - Coordinate the effort of the other organizers
  - ◇ **Organizer**, ConFoo (<http://confoo.ca>) (2009 – present)  
*ConFoo is the largest Web development conference on the East Coast.*
    - Look for, motivate, and coach speakers
    - Find sponsors

- OTHER EXPERIENCE (CONT.)
- ◇ **Maintainer**, AsciiDoc (<http://www.methods.co.nz/asciidoc/version9.html>) (2007 – 2008)  
*AsciiDoc is a lightweight markup language for DocBook*
    - Converted stand-alone program to a library (Python)
    - Fixed several portability issues
    - Improved packaging (Setuptools)
    - Lead the transition to a distributed revision control system (Mercurial)
  - ◇ **Programmer / Developer**, Gazest (<http://ygingras.net/gazest>) (2007 – 2008)  
*Gazest is a wiki based community engine with workflow and storage inspired by distributed revision control systems like Git and Mercurial*
    - Design and Implementation (Python, Pylons, Mako, SQLAlchemy)
    - Plug-in system (Setuptools and entry-points)
  - ◇ **Programmer / Developer**, Fract (<http://ygingras.net/fract>) (2005 – 2007)  
*Fract is a collaborative, web based, fractal explorer*
    - Design and Implementation (Common Lisp)
    - Database backend for collaboration engine (PostgreSQL)
- SKILLS
- ◇ **Languages**  
Common Lisp, Python, R, Perl, C, C++, Bash, SQL (PostgreSQL, MySQL), Java, XML, XPath, XSLT, XHTML, CSS, Regular Expressions
  - ◇ **Bioinformatics**  
Bioconductor, BLAST, BioPython, Clustal
  - ◇ **Graphics**  
OpenGL, Gimp, Blender, Inkscape
  - ◇ **Development**  
Git, Mercurial, Subversion, CVS, Emacs, diff, patch, automake, autoconf
  - ◇ **System Administration**  
GNU/Linux, LDAP, Apache, PostgreSQL, MySQL, Postfix, Exim, Mailman, Zope, Samba
  - ◇ **Software Engineering**  
UML, Design Patterns
  - ◇ **Natural Languages**  
French, English: fluent
- EDUCATION
- ◇ **Astrobiology Institute, University of Hawaii**, Honolulu, Hawaii  
Computational Astrobiology Summer School (2006)
  - ◇ **Université du Québec à Montréal (UQAM)**, Montréal, Qc  
Bachelor's degree in Applied Mathematics and Computer Science (2004 – 2007, interrupted)
  - ◇ **Collège André-Laurendeau**, Montréal, Qc  
DEC en Informatique (College Degree in Computer Science) (1997 – 2000)

- PUBLICATIONS M. Menor, K. Baek, M. Belcaid, Y. Gingras, G. Poisson, *Anacle: A skeleton method for taxonomic annotation of metagenomic DNA-fragments*, submitted, 2009.
- A. Bergeron, C. Chauve, Y. Gingras, *Formal models of gene clusters*, chapter 8 of *Bioinformatics Algorithms: Techniques and Applications*, I. Mandoiu & A. Zelikovsky, (editors), Wiley Book Series in Bioinformatics, pp. 177-202, 2008.
- M. Belcaid, A. Bergeron, A. Chateau, C. Chauve, Y. Gingras, G. Poisson, M. Vendette, *Exploring Genome Rearrangements using Virtual Hybridization*, Asia-Pacific Bioinformatics Conference, Advances in Bioinformatics and Computational Biology, World Scientific, pp. 205-214, 2007.
- G. Blin, A. Chateau, C. Chauve, G. Fertin, Y. Gingras, *Inferring positional homologs with common intervals of sequences*, RECOMB Comparative Genomics International Workshop, Lecture Notes in Bioinformatics 4205: 24-38, 2006.
- G. Blin, A. Chateau, C. Chauve, G. Fertin, Y. Gingras, *CIGAL: a Conserved Intervals Gene ALigner*, Phylogenomics Conference, St-Adèle, March 2006 (poster).
- M. Belcaid, A. Bergeron, A. Chateau, C. Chauve, Y. Gingras, G. Poisson, *Exploring Genome Rearrangements using Virtual Hybridization*, Phylogenomics Conference, St-Adèle, March 2006 (poster).
- O. Gingras, Y. Gingras, A. Levasseur, A. Bergeron, C. Chauve, *A software tool for whole genome synteny comparisons*, RECOMB Comparative Genomics International Workshop, Dublin, September 2005 (poster).