

Robert William Leach

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NYS Center of Excellence in Bioinformatics & Life Sciences
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OBJECTIVE I crave computational challenges associated with biology or chemistry and am in search of a collaborative laboratory and computation team.

SUMMARY	<i>Target Job</i>	Scientific Software Project Manager
	<i>Availability</i>	Fall 2010
	<i>Relocate</i>	Continental US
	<i>Target Salary</i>	Raise Relative to 74K Buffalo NY Salary
	<i>Target Shift</i>	Permanent Day Shift
	<i>Work Status</i>	US Citizen with DOE Q Clearance
	9 years	Programming
	7.5	Computational Biology
	5.5	Molecular Biology
	6.5	Software Engineering
	6	Web Master / DBA / Light *nix SysAdmin

EDUCATION	MS Computer Sci	2003	Univ. of New Mexico	Albuquerque NM
	BS Biochemistry	1996	Grove City College	Grove City PA

SOFTWARE PROJECTS (LANL & CCR)

Research Analysis Support	2007
Genotator Annotation System	2007
Parallel Array CGH Overlay Tool	2007
BioACE 3.0 (Web Cluster Bioinf. Portal)	2007
Influenza Sequence Database	2007
Unfinished Strain Comparison Project	2007
Hepatitis C Virus Database	2007
TSWG Threat Pathogen Airport Detection	2006
CDC <i>Bacillus anthracis</i> Strain Ident. System	2005
<i>Xylella fastidiosa</i> Signature Project	2005
Toxin & Virulence Factor Database	2005
BASIS Bio-Aerosol Sentry	2003
Threat Pathogen Database	2003
Oral Pathogens	2003
Remote Genome Annotation System	2002
Sexually Transmitted Diseases	2001
Chem. & Biol. National-Security Program	2001
Human Papilloma Virus Database	1999

PLATFORMS / LANGUAGES

Linux	Solaris	Mac OS X	PBS Cluster	Windows	SGI
Perl	C/C++	SQL	Javascript	Java	MATLAB

BIOINFORMATICS SOFTWARE DEVELOPED

StrainDiff	Partial Assembly Analysis
SNPArraySolver	Microarray Design System
genWave	Pathogenicity Wavelet Analysis
Bugspray	Genome Alignments
PredPath	Pathway Predictions
Tandyman	Tandem Repeat Utility
DBCGL	Database Web Annotation Class
GeneX	Gene Expression Clustering
ATK	Genome Annotation Toolkit
BLASTMT	BLAST Maintenance System

SOFTWARE ENGINEERING EXPERIENCE

Project Manager	Config Control Board Lead	Regression Tester
Configuration Manager	Quality Assurance Inspector	RCS CVS & SVN

PERSONAL PROJECTS

Santa Fe Swing	Swing Dancing Website
IO::Pipe::Producer	Producer.pm Perl Module
Swingin' Suites	Backstage DVD 2003 2004 2005
LACW	French Horn, Los Alamos Community Winds
ShareSnap	Web-Based Photo Album Package
Web Hosting	Friends' & Family's Websites E.g. ziaumcsf.org
Proximigoogle	Google Word Proximity Filter
WebFiles	Web Application File & Cache Management

EXPERIENCE

2007-present	Scientific Programmer Center for Computational Research Buffalo NY
1999-2007	Computational Biologist / Software Engineer Los Alamos National Laboratory Los Alamos NM
1998-1999	Molecular & Cellular Biology Technician Boston College Biology Department Boston MA
1997	Graduate Research Associate & Teaching Associate SUNY at Buffalo Department of Biological Sciences Buffalo NY
1996	Analytical Chemist Westwood Squibb Pharmaceuticals Buffalo NY
1995	Molecular Biology Research Technician SUNY at Buffalo Department of Biological Sciences Buffalo NY

PUBLICATIONS

non-comprehensive

P. T. Hraber, R. W. Leach, L. P. Reilly, J. Thurmond, K. Yusim, C. Kuiken, and the HIV database team; **Los Alamos Hepatitis C Virus Sequence and Human Immunology Databases: Resources for Antiviral Research** Paper Pending

P. E. Pardington, R. W. Leach, R. T. Okinaka, P. Keim, and R. Cary; **Francisella Genotyping Microarrays** Paper Pending

R. Leach and T. Brettin; **Generational Difference Analysis** Technical Report, Paper Pending

POSTERS

non-comprehensive

R. Leach; **The Sexually Transmitted Diseases Database** Frontiers in Bioinformatics, UB Center for Excellence in Bioinformatics, Jun 2003

S. Bhotika et al; **Pathogen Databases @ Los Alamos National Laboratory** May 2003

PRESENTATIONS

non-comprehensive

R. Leach; **Toxin & Virulence Factor Database & genWave** TSWG Annual Program Review Meeting Dec 2005

TSWG Annual Program Review Meeting Dec 2004 R. Leach; **SNP Extension-based MicroArray Probe Selection**

LANL Meeting Nov 2004 R. Leach; **Yersinia pestis Pathogenicity Island Analysis**

TSWG Review Meeting Jul 2004 R. Leach; **SNP Array Design & Analysis & genWave**

LANL / Mitre External Collaborator Meeting Oct 2003 R. Leach; **The TVFac Database**

LANL External Collaborator Meeting May 2003 R. Leach; **Predicting the Expression of a Gene of Interest in Gene Expression Array Data**

R. Leach; **Sequence Database** LANL Meeting 2003

R. Leach; **ORALGEN: New Functionality of '03** LANL Meeting 2003

R. Leach; **Software Configuration Management** LANL Meeting 2002

R. Leach; **Multi-Database Interaction Application** LANL Meeting 2001

R. Leach; **Presenting Bugspray 2.0** LANL Meeting 2000

R. Leach; **The Genome Annotation Toolkit** LANL Meeting 2000