

BioRuby and distributed development

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URL: <http://biogems.info/>

Source code: Linked from biogems.info

License: All licenses are of type approved by the Free Software Foundation (FSF)

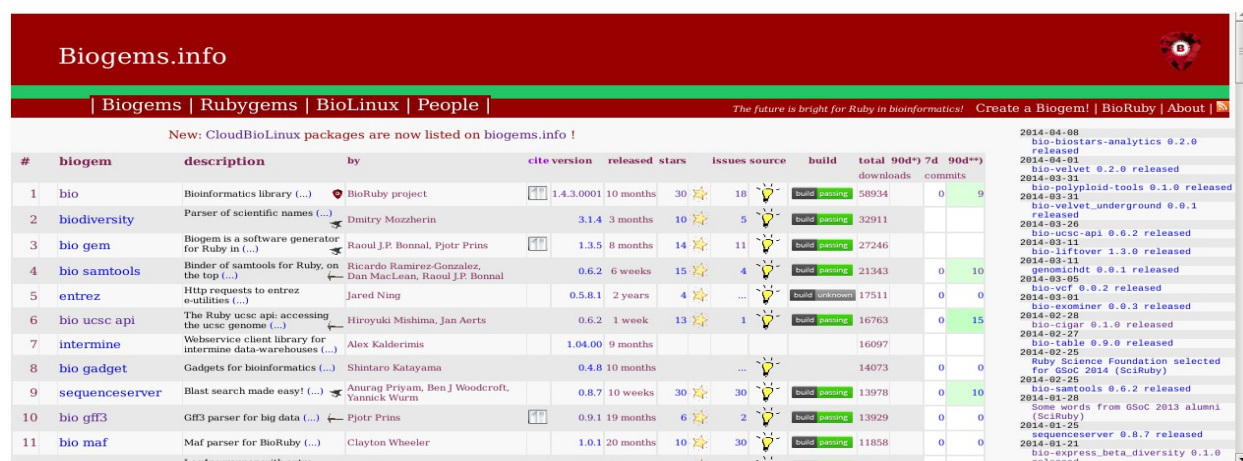
With the distributed development of biogems, listed on <http://biogems.info/>, the BioRuby community is one of the most active Open Bioinformatics Foundation (OBF) communities in terms of number of projects, git commits and library downloads.

In this talk we will quantify and visualize what it means to allow contributing independent small modules and tools to the bioinformatics community. Not only has the decision to distribute development led to a larger group of regular contributors, which puts less strain on the core maintainers, but it also led to a number of useful command line tools that have been introduced, such as bioruby-table, bioruby-samtools, bioruby-ngs and bioruby-vcf. The code generators that we use fast-track biogem development and drive the rapid creation of new software modules with support for command line interfaces, unit testing, and the Travis continuous integration service.

In addition we will discuss how the BioRuby community is making great strides in leveraging web technologies for biomedical data analysis using web services and linked data. This opens heterogeneous data sources and facilitates easier data integration in bioinformatic analysis pipelines.

We aim to expand tracking other Bio* projects in <http://biogems.info/> and make it a comprehensive resource for the OBF. The BOSC meeting will allow us to fine tune such ideas and gather feedback from the bioinformatics community.

Figure 1: Snapshot of the biogems.info website which contains relevant information about BioRuby related modules



Biogems.info										
Biogems Rubygems BioLinux People										
New: CloudBioLinux packages are now listed on biogems.info !										
#	biogem	description	by	cite version	released	stars	issues source	build	total 90d* 7d 90d**	
1	bio	Bioinformatics library (...)	BioRuby project	1.4.3.0001	10 months	30	18	build passing	58934	0 9
2	biodiversity	Parser of scientific names (...)	Dmitry Mozherin	3.1.4	3 months	10	5	build passing	32911	
3	bio gem	Biogem is a software generator for Ruby in (...)	Raoul J.P. Bonnal, Pjotr Prins	1.3.5	8 months	14	11	build passing	27246	
4	bio samtools	Binder of samtools for Ruby, on the top (...)	Ricardo Ramirez-Gonzalez, Dan MacLean, Raoul J.P. Bonnal	0.6.2	6 weeks	15	4	build passing	21343	0 10
5	entrez	Http requests to entrez e-utilities (...)	Jared Ning	0.5.8.1	2 years	4	...	build unknown	17511	0 0
6	bio ucsc api	The Ruby ucsc api: accessing the ucsc genome (...)	Hiroyuki Mishima, Jan Aerts	0.6.2	1 week	13	1	build passing	16763	0 15
7	intermine	Webservice client library for intermine data warehouses (...)	Alex Kalderimis	1.04.00	9 months				16097	
8	bio gadget	Gadgets for bioinformatics (...)	Shintaro Katayama	0.4.8	10 months	...			14073	0 0
9	sequenceserver	Blast search made easy! (...)	Anurag Priyam, Ben J Woodcroft, Yannick Wurm	0.8.7	10 weeks	30	30	build passing	13978	0 10
10	bio gff3	GFF3 parser for big data (...)	Pjotr Prins	0.9.1	19 months	6	2	build passing	13929	0 0
11	bio maf	Maf parser for BioRuby (...)	Clayton Wheeler	1.0.1	20 months	10	30	build passing	11858	0 0
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