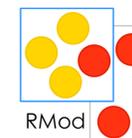


Why do ***you*** need a
strong open-source
Smalltalk!

S. Ducasse

<http://www.pharo.org>



Pharo

- ✦ MIT license
- ✦ Pure object language
- ✦ Great community of active doers
- ✦ Powerful
- ✦ Elegant and fun to program
- ✦ Living system under your fingers
- ✦ Mac, Linux, Android, iOS, Windows

Some projects

Web frameworks - Seaside, Iliad, HTTP2, Tide, Aida, Mustache, Oauth,
WebSocket CSS styling Format parsers - XML, HTML, NeoJSON, NeoCSV.
Application Security, Graphics frameworks - Roassal, Mondrian, EyeSee, GraphET,
Tool builders - Glamour, Spec, XUL, MacNative, Databases - DBXTalk, Mongo,
Riak, CouchDB, MySQL, PunQLite. Object-Oriented databases - Magma, Goods.
Database abstraction - Voyage, ROE MetaCompiler - Petit Parser, SmaCC - Proxy,
Logging - SystemLogger, Toothpick, SimpleLogger Units: Aconcagua, Units Time -
Chronos Calendars, Timezones Productivity Tools - Codecritics, Refactorings,
Cherry picking merge tools: merge tool, Komitter Versionner, Mock frameworks
(baby mock), PDFgeneration - Artefact, Testing frameworks - PhExample, SUnit
Assembly generation: ASMJIT, Integration Tools: Hudson, Alternate window
manager, Games: Tetris, Sokoban, Miner, Chess, CrossWords MetaModeling
Frameworks - Magritte, Platypus, Cloud deployment - cloudfork cloudPharo, 3D:
Roassal3d, NBOpenGL, JVM connection Bio informatics, ODE solvers, Interactive
Geometry - DrGeo...

Pharo in numbers

- ✦ 282 000 downloads on the Inria gforge
- ✦ 40-60 active committers
- ✦ > 600 mailing-list members
- ✦ 200 license agreements
- ✦ 60 association members
- ✦ 11 industrial consortium members
- ✦ around 400 external projects or more

Welcome to SmalltalkHub

The free, opensource, Smalltalk projects management application

No account yet? Register!

WARNING The following is a preview of the exploration features of SmalltalkHub. More to come!

1708 repositories, **1390** users registered and **133313** packages uploaded.

Recently registered users

-  JuanIgnacioVaccarezza (JuanIgnacioVaccarezza)
-  AmulyRaj (AmulyRaj)
-  MoneyBoy (MoneyBoy)
-  mattgoodwin (mattgoodwin)
-  bmathias (bmathias)
-  arkbar (arkbar)
-  eftanga (eftanga)
-  lkloster (lkloster)
-  iantor (iantor)
-  dposture (dposture)
-  gtesta (gtesta)
-  username (username)

Recently created projects

- [SpecUIAddOns](#) (created the Mon Jul 28 2014)
- [Rockola](#) (created the Sun Jul 27 2014)
- [LightsOutgame](#) (created the Sat Jul 26 2014)
- [Teapot](#) (created the Fri Jul 25 2014)
- [GeneticAlgo](#) (created the Fri Jul 25 2014)
- [ATHENA](#) (created the Fri Jul 25 2014)
- [ShcTestProject1](#) (created the Fri Jul 25 2014)
- [FamixSQL](#) (created the Thu Jul 24 2014)
- [DeployUtils](#) (created the Thu Jul 24 2014)
- [Deprecator](#) (created the Thu Jul 24 2014)
- [WindowsPharoDeveloper](#) (created the Thu Jul 24 2014)
- [DynaCASE](#) (created the Wed Jul 23 2014)
- [argumentAnalysisPublic](#) (created the Wed Jul 23 2014)

We are a cool and growing
community



Tweets, blogs, buzz

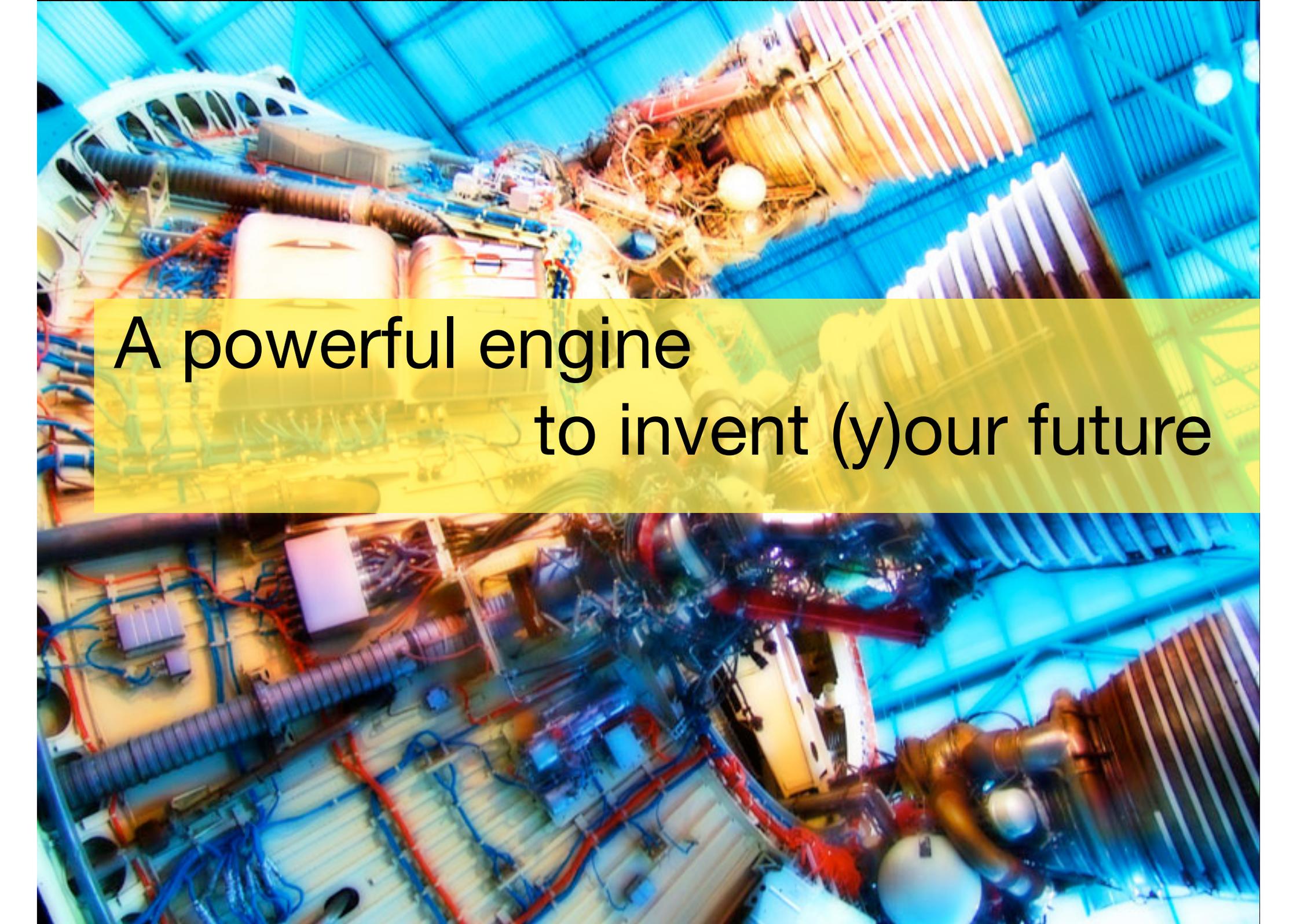
- ✦ Pharo 3,065 tweets / 1018 followers
- ✦ S. Ducasse tweets 513/ 735 followers
- ✦ S. Stinckwich 8712 / 1006 followers
- ✦ Moose 502 tweets/ 255 followers
- ✦ Youtube Pharo smalltalk: about 1540 videos!

Blogs

- ✦ <http://pharo.org/blogs>
- ✦ <http://astares.blogspot.co.uk>
- ✦ <http://clementbera.wordpress.com>
- ✦ <http://pharoweekly.wordpress.com>
 - Guille Polito, [Playing with Objects](#)
 - Mariano Martinez Peck, [Sending messages](#)
 - Igor Stasenko, [Computer Adventures](#)
 - Laurent Laffont, [MaGaLoMa](#)
 - Esteban Lorenzano, [The Martian Chronicles](#)
 - Tudor Girba, [Humane assessment](#)
 - Philippe Back, [The Philippe Back Report](#)
 - Yuriy Tymchuk, [Uko on Code](#) and [Sleepy Coders](#)



**where business/innovation
can bloom**



A powerful engine
to invent (y)our future

Since may 2008

**Very High
Activity**



- ✦ Pharo 3.0 - Apr 2014 (around 2600 closed cases)
- ✦ Pharo 2.0 - Apr 2013 (1657 closed cases)
- ✦ Pharo 1.4 - Apr 2012 (988 closed cases)
- ✦ Pharo 1.3 (736 closed cases)
- ✦ Pharo 1.2 - mar 2011 (691 closed cases)
- ✦ Pharo 1.1 - jul 2010 (918 closed cases)
- ✦ Pharo 1.0 - oct 2009 (307 closed cases)

Why do you have interest in
a strong open-source
smalltalk?

We produce smart engineers!

Do you think they should be
smart Python, Ruby, Scala,
Javascript engineers only?

Pharo's Teachers

- Uni. of Buenos Aires • Uni. of Bern • Uni. of Maroua • Uni. of Brussels • Ecole des Mines de Douai • Uni. de Savoie • Ivan Franko Nat. Uni. of Lviv • Czech Technical Uni. • CULS Prague
- Uni. of Quilmes • Uni. of La Plata
- Northern Michigan Uni.
- Uni. Technologica Nacional (UTN) • Uni. Catholic of Argentina • Uni. of Santiago
- Uni. Policnica de Catalunya • Uni. of Saarland
- Uni. de Bretagne Occidentale • Uni. of Tomsk

Research Groups

Lafhis (AR)

Software Composition Group (CH)

CAR (FR)

RMOD (FR)

Ummisco (IRD)

Reveal (CH)

Lysic (FR)

Pleiad (CL)

CEA-List (FR)

Uqbar (AR)

Design ideas

Object-centric debugging

First-class slots

Bootstrapping a Smalltalk

Vector graphic core

New modules

New frameworks

STON, Tide, Voyage, Babymock, Mocketry...

Example: OpenCL in Pharo

The screenshot displays the Pharo IDE interface. On the left, a file browser shows a project structure with folders like 'OpenCL-Core' and 'OpenCL-Examples'. Below it, a code editor shows the implementation of 'exampleRadialGradient' using OpenCL. The code includes comments and kernel definitions for texture coordinates and pixel emission.

```
exampleRadialGradient
self new exampleRadialGradient
self makeImage:
__kernel void makeImage(int width, int height, __global __write_only int *image) {
    int x = get_global_id(0);
    int y = get_global_id(1);
    int destPos = y*width + x;

    /* Texture coordinates. */
    float s = (float)x / (width - 1);
    float t = (float)y / (height - 1);
    float2 coord = (float2)(s, t);

    /* */
    float r = length(coord)*2.0f - (float2)(1.0f, 1.0f);

    /* Emit a black pixel. */
    image[destPos] = encodeRGBA(0.0f, min(r, 1.0f), 0.0f, 1.0f);
}
```

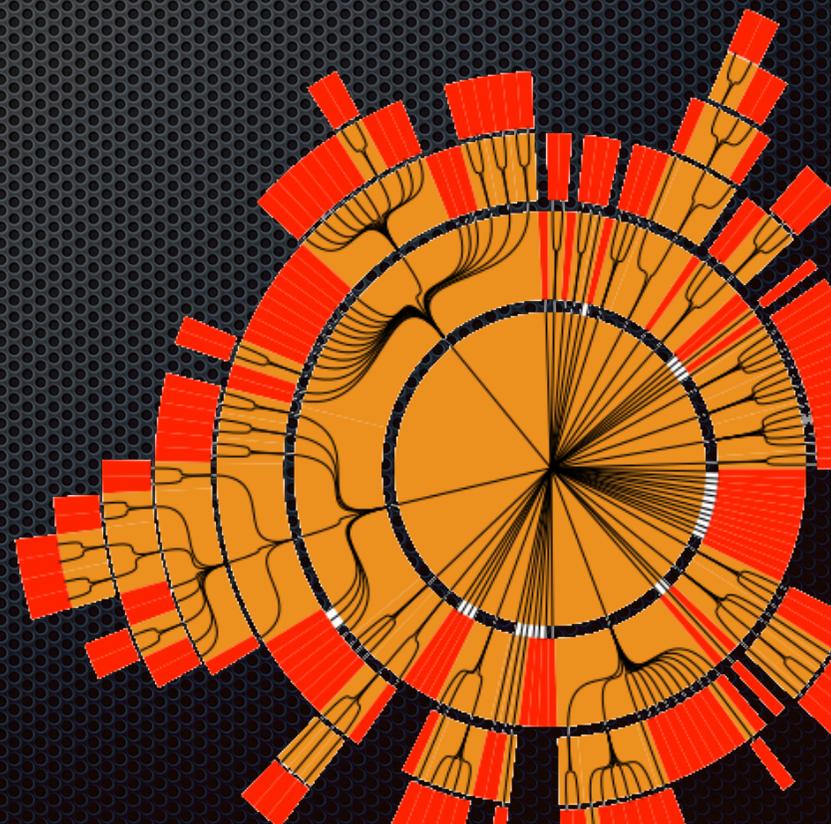
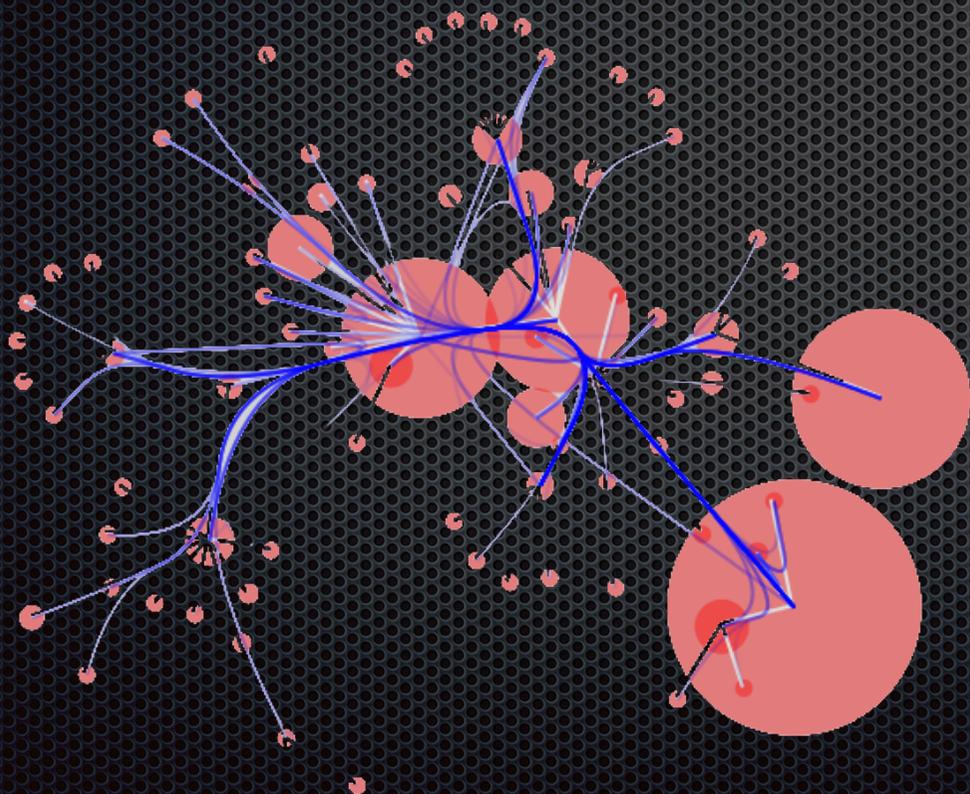
In the center, a window displays a colorful radial gradient image. On the right, a 3D scene window shows a water simulation with ripples, titled 'WDFPSSimpleExample6 - 99.21 FPS'. The 'Workspace' window shows a 'WDWaterMaterial' object with properties like 'programAssembler', 'diffuseColor', and 'specularColor'. The 'EyeInspector' window shows the material's parameters, including 'self harmonicA: 3 amplitude: 0.05 frequency: 2.5 center: WDVector2 new: 2.0 y: 2.0e'.

✦ <http://youtu.be/-2ida5Q1mbg>

Proven Innovation!

seaside 

Proven Innovation!



all MIT!

- ✦ GraphET, EyeSee
- ✦ Tide (Amber/Pharo)
- ✦ Voyage (NoSQL)
- ✦ Zinc
- ✦ WebSocket, OAuth, Riak, MongoDB, couchDB, mustache, PunQlite
- ✦ ...

Be with the buzz Market it

- ✦ New frameworks
- ✦ New books!
- ✦ Activity



International books

- ✦ Pharo by example
 - ✦ translated to french, merci!
 - ✦ translated to spanish, gracias!
 - ✦ translated to japanese, ありがとう!



DEEP INTO Pharo



ALEXANDRE BERGEL - DAMIEN CASSOU - STÉPHANE DUCASSE - JANNIK LAVAL



ALEXANDRE BERGEL - DAMIEN CASSOU
STÉPHANE DUCASSE - JANNIK LAVAL

ESUG 2013 Edition

- ✦ Pharo for the Entreprise
- ✦ Pharo web stack
- ✦ Fun with Pharo
 - ✦ If you want to contribute...

They understand their benefits

GemTalk
Systems

LAMRC

Back-End Wafer-Level Packaging



MadEnvironment

HRWorks



Pharo is a clean, innovative, open-source Smalltalk-inspired environment. Pharo's goal is to deliver a clean, innovative, free open-source Smalltalk-inspired environment. By providing a stable and small core system, excellent dev tools, and maintained releases, Pharo is an attractive platform to build and deploy mission critical Smalltalk applications. The license of Pharo is MIT with some original parts remaining under the Apache License. All contributors are required to sign our license agreement.

The consortium is for legal entities, if you are an individual that wants to support Pharo participate to the [Pharo association](#).

Industrial members



Golden



Pharo consortium portal

A clean, innovative, open-source, Smalltalk-inspired environment.

What's new ([See all](#))

[A new age for Pharo](#)

1 March 2013 5:37:47 pm by Stéphane Ducasse

After some efforts, we are proud to announce the consortium around Pharo. With such consortium companies and academic partners will be able to collaborate and sustain the development of the Pharo envi...

[Entries \(RSS\)](#) and [Comments \(RSS\)](#)

Consortium Members

- ✦ Managed by Inria for now
- ✦ Who: companies, institutions, user groups
- ✦ Privileged access to the **core** development team
- ✦ Influence **priorities** of the next development
- ✦ **Engineering support time**
- ✦ Job posts
- ✦ Training/Conferences special prices

Fees

- Gold 4000
 - 4 days of engineering time + multiple job descriptions for job dashboard + diamond sponsor.
- Silver 2000
 - two days of engineering time + one job description + diamond sponsor.
- Bronze 1000
 - one day of engineering time + diamond sponsor.

$25 * 2K = 50 * 1K$
= 1 full engineer for Pharo



This is the **Pharo** users association site

Pharo is a clean, innovative, open-source Smalltalk-inspired environment.

[Home](#)

[Members](#)

[News](#)

[About](#)

- ✦ Managed by the Pharo Association
- ✦ Individuals
 - ✦ Premium (99 Euros)
 - ✦ Normal (40 Euros)
- ✦ Join and participate what we do!

Join Us

Creating good energy,
software quality,
learning and having fun

<http://pharo.org>



**where business/innovation
can bloom**