

Sage

Prof. William Stein

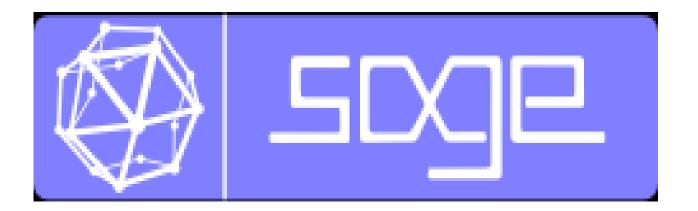
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What is Sage?

- **Goal:** Create a viable free open source alternative to Magma, Maple, Mathematica and Matlab.
- A large open source mathematics software project with well over 10,000 users and nearly 200 contributors.





Market Opportunity

- Mathematical Software solutions are used in a variety of fields
 - > Pure Mathematics
 - > Science: Physics, Chemistry, Statistics, ...
 - > Engineering
 - > Finance
 - > Education: College, University
- Economic considerations entail re-evaluation of currently used solutions in favor of open-source software.



Value Proposition

- \$ 0 + you get the source-code
- Secondary value propositions:
 - > Sage is never "unavailable" due to licensing.
 - > Investment into teaching materials are not lost.
 - Learning a common programming language (Python) has cross-effects.
 - > Third-party library/extension stay useful since the product is maintainable; Code might migrate into main product line.
 - > Users are empowered to fix problems by themselves.



Solution Description

- Sage is an open-source mathematical software system
 - > Web-Interface, server based; local setup possible; command-line interface; as a library
 - > Covers basics up to frontier research topics in pure mathematics.
 - > Mainstream (Python-based) object oriented framework for mathematics.
 - > Focus on functionality, speed, and robust development.
 - > Visualize using graphics and plots
 - Interactively grasp and explore a problem
 - > Publish your work (LaTeX embedding)



Solution Description



Differentiators

- Only vendor to offer a common used programming language (Python) at the interface level
- Web-Based Notebook primary interface
- Open-Source
 - > Easy introspection how it works (education)
 - > Possibility to customize or adapt to own infrastructure
 - > Users are empowered to fix problems by themselves.
- Transparency is mandatory for all sciences and Sage transports these values.



How to sell

- Download for free at http://www.sagemath.org/
- About 5000 unique downloads per month



How to Engage

- How can Sun field and channel engage with your organization
 - > Press Releases (USA, Europe, Asia, South America)
 - > Support Conference Booths
 - > Community Platforms (online)
 - > Online Advertising
 - Sage-in-a-Box: Sun Hardware + Sage preconfigured and thoroughly tested.



Thank you!

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