

# CONTRIBUTING TO MADAGASCAR

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“Run a program as you wish, for any purpose you wish, not limited to any narrowly defined application.”

“Help yourself by improving the program (which requires access to source code).”

“Help your neighbor by sharing a copy of the program with them.”

“Help community by sharing the improved copy at large.”

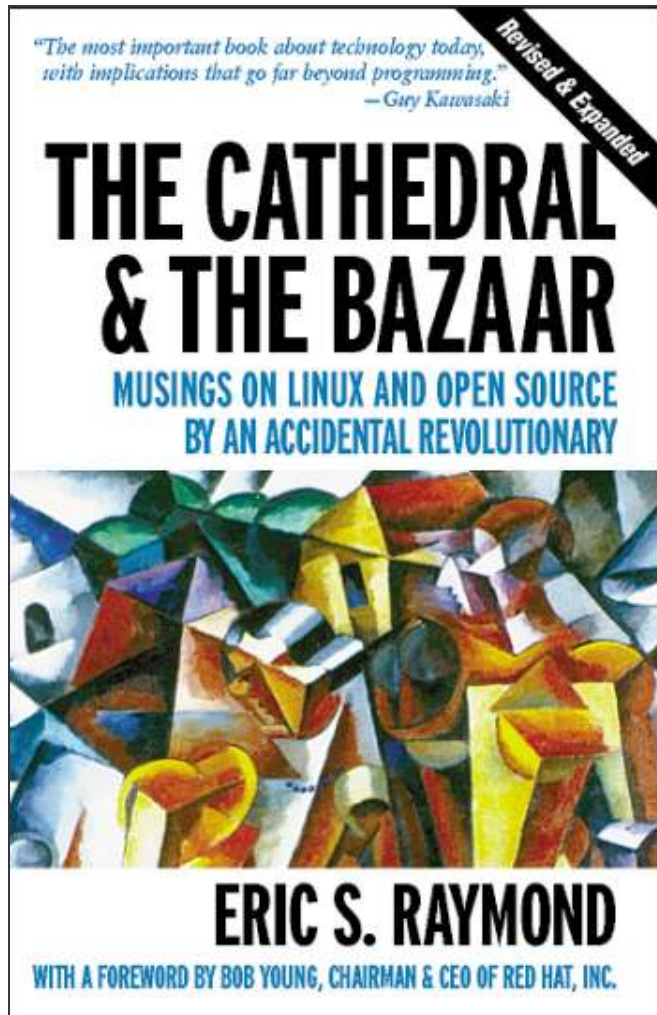
*“Unquestionably one of the great seminal figures of the hacker culture.”*  
—Eric Raymond, open source evangelist and author of *The Cathedral and the Bazaar*

# FREE AS IN FREEDOM

**RICHARD STALLMAN'S  
CRUSADE FOR FREE SOFTWARE**



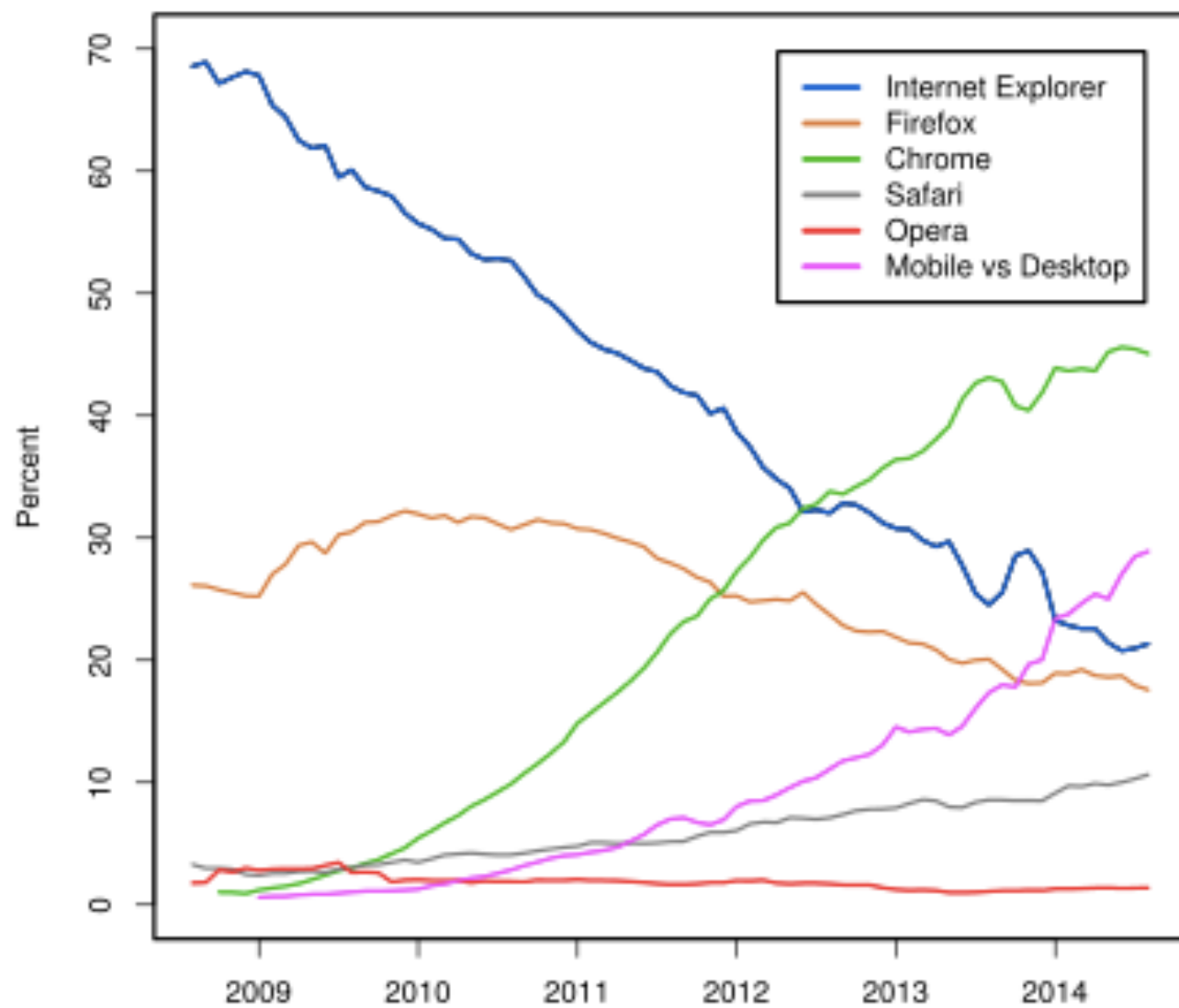
**SAM WILLIAMS**



“Given a large enough beta-tester and co-developer base, almost every problem will be characterized quickly and the fix obvious to someone.”

"Given enough eyeballs, all bugs are shallow."

## Usage share of web browsers

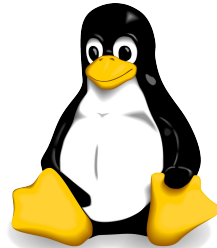


Year  
Source: StatCounter

# Free Software Examples

- **Linux kernel**

- GPL, 1991, Unix



- **GIMP**

- GPL, 1996, Photoshop



- **R project**

- GPL, 1993, S



- **Sage**

- GPL, 2005, MATLAB/Mathematica



- **Madagascar**

- GPL, 2006, SEPLib

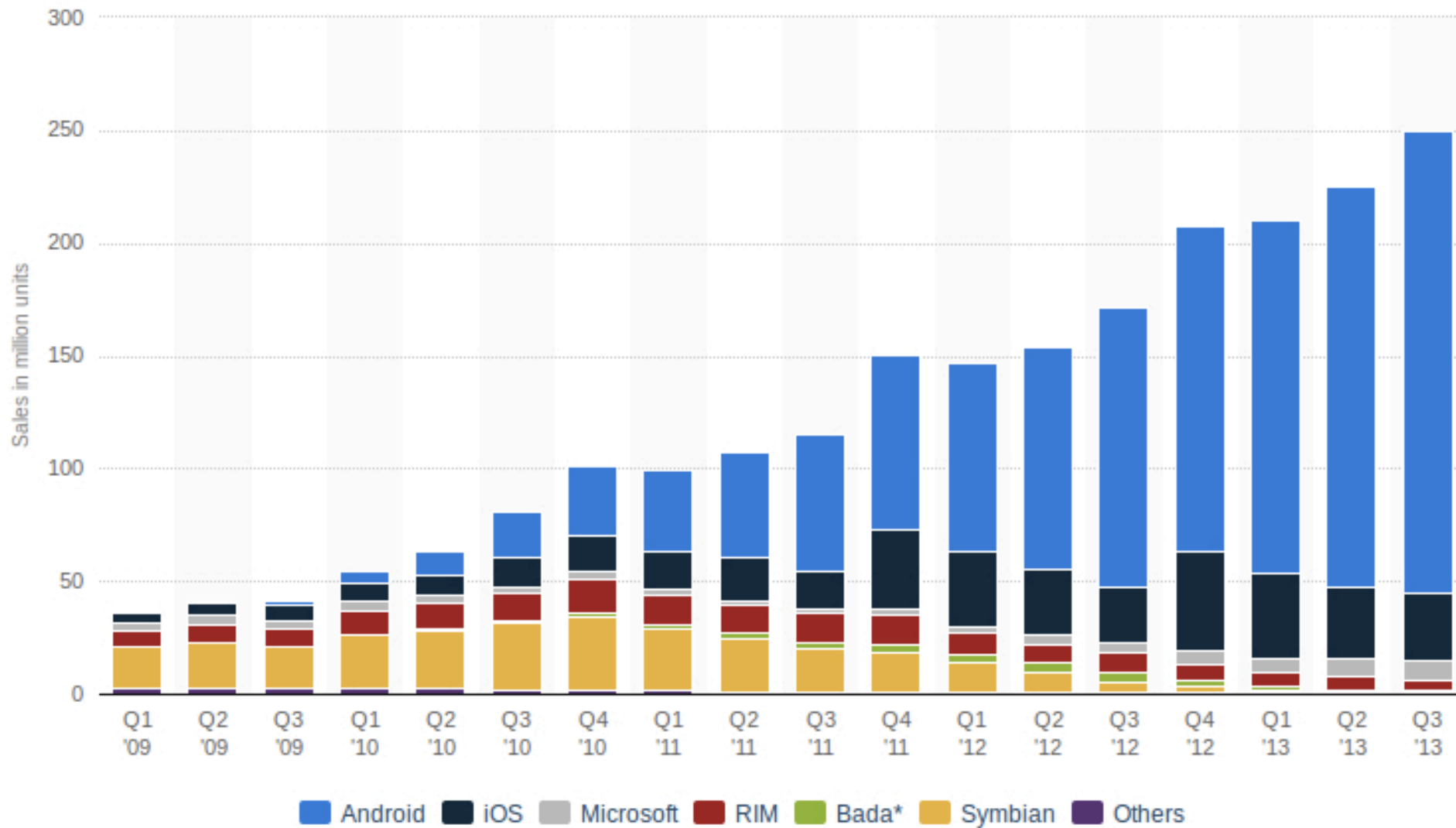


# GPL License

- “Using the GNU GPL will require that all the released improved versions be free software. This means you can avoid the risk of having to compete with a proprietary modified version of your own work.”  
<http://www.gnu.org/licenses/gpl-faq.html>

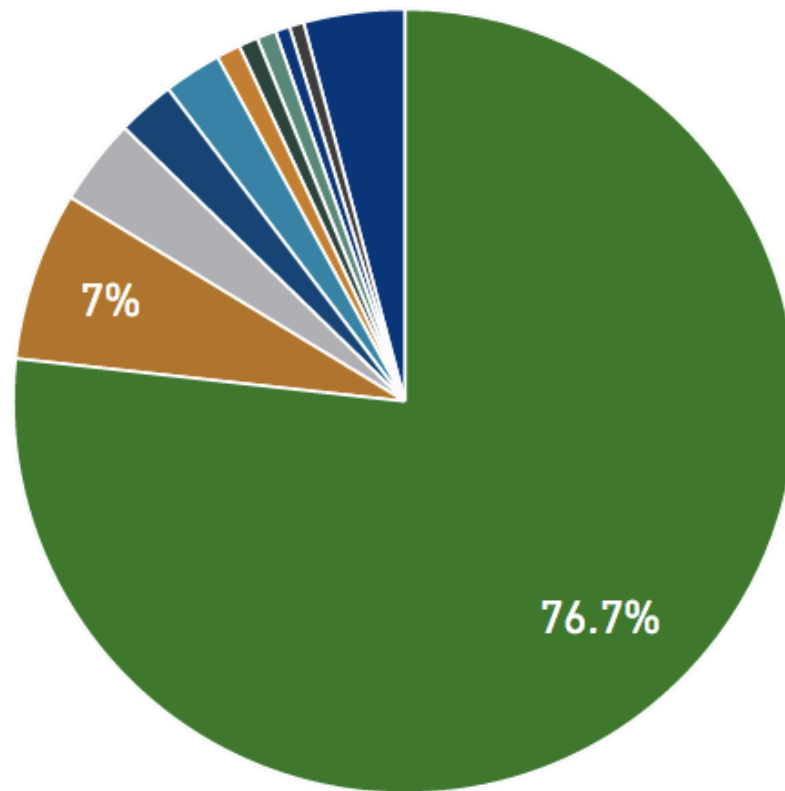


# Global smartphone sales to end users from 1st quarter 2009 to 3rd quarter 2013, by operating system (in million units)





## Operating System System Share



- Linux
- Cray Linux Environment
- SUSE Linux Enterprise Ser...
- AIX
- CentOS
- Redhat Enterprise Linux 6.4
- Bullx Linux
- RHEL 6.2
- bullx SCS
- bullx SuperCOMputer Suit...
- Others

<http://www.top500.org/>



# How to Add Your Own Programs

“Help yourself by improving the program...”

- Create a directory for yourself or your group under **\$RSFSRC/user**. Put your programs there.
- Create **SConstruct** file in your directory by following examples from other **user** directories.
- [http://www.ahay.org/wiki/  
Adding\\_new\\_programs\\_to\\_Madagascar](http://www.ahay.org/wiki/Adding_new_programs_to_Madagascar)

# How to Contribute Your Programs

“Help community by sharing the improved copy...”

- [Register at GitHub.](#)
- Access Madagascar project at <https://github.com/ahay>
- Use either Git or Subversion
- Add reproducible examples of using your program under **\$RSFSRC/book**.
- [http://www.ahay.org/wiki/Contributing\\_new\\_programs\\_to\\_Madagascar](http://www.ahay.org/wiki/Contributing_new_programs_to_Madagascar)

# Communication Tools

- Wiki page <http://www.ahay.org/>
- Blog <http://www.ahay.org/blog/>
- GitHub project (89 developers)
  - <https://github.com/ahay>
- GitHub issues
  - <https://github.com/ahay/src/issues>
- Mailing lists (~400 subscribers)
  - <https://lists.sourceforge.net/lists/listinfo/rsf-user>
  - <https://lists.sourceforge.net/lists/listinfo/rsf-devel>
- LinkedIn group (525 members)
  - <http://www.linkedin.com/e/vgh/1847746>



# 2016 Madagascar School?

- **Poland**
- **Austria**
- **South Korea**
- **Brazil**





# 2016 Working Workshop?



- **Seismic Interpretation**
- **Documentation**
- **C++/Java/Python/Fortran**
- **MATLAB/Julia**

# Conclusions

- **Recognize Madagascar project as a community effort**
- **Understand freedoms provided by open source**
- **Use online communication tools to participate in the development and to connect with other users**
- **Attend schools and working workshops**

