

# Luke Palmer

Software Engineer

720-837-6741

[lrpalmer@gmail.com](mailto:lrpalmer@gmail.com)

I have nine years of programming experience with focus on software architecture and abstraction, scripting languages<sup>1</sup>, and automated testing and quality assurance. I have six years of technical communication experience (on the Perl 6 project and as a teaching assistant). I have a fundamental desire to design clean, elegant, and modular code.

## Accomplishments

- Worked with Larry Wall as a member of the Perl Cabal (Perl 6 Design Team) since 2004.
- Implemented the Perl Grammar Engine in Perl 6, an essential piece of the bootstrapping process, using a very modular design (“virtual classes”).  
<http://svn.pugscode.org/pugs/ext/Parse-Rule/>
- Authored 15 Perl 5 modules including a large predicate logic engine, several object-oriented design tools, an attribute grammar engine (complex data structure processing tool), among other things, all with extensive documentation and test suites. <http://search.cpan.org/~lpalmer/>
- Authored and co-authored many small, cross-platform games, some of which are at <http://soylentsoft.net/>. My largest contributions to the projects there were: the fluid dynamics engine for Ichor, the fast automated solver for Minesweeper Infinity (to ensure that the user

---

<sup>1</sup>Embedding, using, and designing.

never gets an unsolvable board), and the transactional logic engine for Telegnosis (well, all of Telegnosis, actually).

- Presented as an “emerging topics” speaker at the O’Reilly Open Source Convention 2004 a talk entitled “A Language for Games”.  
[http://conferences.oreillynet.com/cs/os2004/view/e\\_sess/4969](http://conferences.oreillynet.com/cs/os2004/view/e_sess/4969)

## Career History/Education

- BA/MA student of mathematics at the University of Colorado since 2002, presently on a year-long hiatus<sup>2</sup> until spring 2008. GPA: 3.32; Major (mathematics) GPA: 3.80.
- Worked on the large, open source Perl 6 project continuously since 2001.
- Teaching Assistant in Physics 2 at CU in 2006 under Dr. Steven Pollock.
- Teaching Assistant in Introductory Computer Science at CU in 2006 under Dr. Susanne Sherba.
- Worked on MVT (mathematics visualization toolkit) for the summer of 2005. <http://amath.colorado.edu/java/index.php>
- Worked on a medical natural language processing project in 2004 with Dr. Robert Bruegel and Dr. Ngo Thanh Nhan (not associated with the University of Colorado).
- Teaching Assistant in Calculus 2 at CU in 2004 under Dr. Mark Ablowitz.
- Worked on a medical expert system in 2003 with Dr. Robert Bruegel.
- Teaching Assistant in Physics 2 at CU in 2003 under Dr. Mike Dubson.

---

<sup>2</sup>And I am willing to go back to school one or two classes at a time if I find a job I like

## Qualifications

- 7 years experience with C and C++; I know all weird the nooks and crannys of C++, and can use them in order to achieve the best design.
- Plenty of experience with physics programming (wrote a physics engine for a game early on, and have made several games using the Open Dynamics Engine physics library).
- Experience with *many* other languages, including Perl, Ruby, Lua, Python, Java, Haskell, Lisp, Prolog, Curry, Scala, .... I can learn new languages very quickly. Experience with embedding Perl, Ruby, and Lua into C++ projects.
- Lots of experience with Subversion and some with CVS.
- Experience with JUnit, Test::More, and building my own unit testing frameworks with Test::Builder.
- Fundamental desire for clean, abstract software design. Lots of experience refactoring code into such designs.
- Desire and experience in building extremely simple but powerful systems, usually strongly founded in mathematical theory.

## References

- Larry Wall. Mountain View, CA. 650-691-9038 (home). [larry@wall.org](mailto:larry@wall.org)
- Robert Bruegel. Lafayette, CO. 303-499-1685. [rbruegel@aol.com](mailto:rbruegel@aol.com)