

# PHILLIP TOLAND, SOFTWARE DEVELOPER

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## SUMMARY OF QUALIFICATIONS

14 years of experience working with such diverse technologies as Erlang, Ruby, Java, C++ and .NET. Solid knowledge of UNIX platforms such as Mac OS X and various flavors of Linux. Able to adapt to changing circumstances during development and to effectively communicate project status to stakeholders. A strong belief in agile development methodologies and a commitment to delivering software early and often.

## OPEN SOURCE PROJECTS

All source code is hosted at <http://github.com/toland>

<b>bdberl</b>	Erlang port driver providing access to BerkeleyDB	Erlang, C
<b>erlbox</b>	Rake tasks and scripts for building Erlang programs	Ruby, Erlang
<b>patron</b>	Ruby HTTP client based on libcurl	Ruby, C
<b>recall</b>	Simple Ruby -> Mnesia bridge	Ruby, Erlang
<b>qlmarkdown</b>	QuickLook generator for Markdown files	ObjectiveC
<b>app_version</b>	Rails plugin for managing your web app's version number	Ruby

## PROFESSIONAL EXPERIENCE

**Software Developer**  
Sep. 2007 – Present

The Hive  
Needham, MA

### Project Magneto (Developer)

- ❖ Worked with two other developers to build a distributed, fault tolerant data storage system in **Erlang**.
- ❖ Assisted in writing backends for **Mnesia**, **Tokyo Cabinet** and **BerkleyDB** (bdberl).
- ❖ Wrote a reusable build framework with **Rake** and scripts written in **Ruby** and **Erlang** (erlbox).
- ❖ Wrote an HTTP/JSON front end to the core storage service with **Mochiweb** and **eep0018**.
- ❖ Wrote a **Ruby** client for the HTTP interface and provided a high-level API similar to **ActiveRecord**.
- ❖ Worked on a **C++** client that used the HTTP API and an **Erlang** client that interacted with the server using RPC.
- ❖ Built a web admin application in **Erlang** using the **Nitrogen** framework.
- ❖ Consistently delivered releases every two weeks.

### Publisher System (Developer)

- ❖ Worked with a team to build the second generation affiliate system for singlesnet.com using **Ruby on Rails**.

### Infrastructure

- ❖ Assisted in migrating the development team from **Subversion** to **Git**. Managed the company's **Git** repositories.
- ❖ Setup and administered **Redmine** as a replacement for **Trac**.

**Enterprise Architect**  
Jan. 2006 – Aug. 2007

CapRock Communications  
Houston, TX

### CapRock Customer Portal (Developer)

- ❖ Developed a customer facing web application for CapRock.
- ❖ Original spec called for development in Java. **Ruby on Rails** was used instead due to very tight schedule.
- ❖ Worked closely with project manager to track changing customer requirements.
- ❖ The portal integrates with HP OpenView ServiceDesk, CA Spectrum and in-house applications.
- ❖ Portal interface uses valid semantic **XHTML** and **CSS**.
- ❖ The portal is deployed on **Ubuntu Linux** and is developed on **Mac OS X**.

### CapRock Enterprise Architecture (Enterprise Architect, Developer)

- ❖ Documented existing CapRock architecture.
- ❖ Organized monthly "lunch and learn" sessions where team members give a presentation during lunch.
- ❖ Designed and implemented several system integrations using **Ruby**, **Rails** and **Perl**

**Project Architect**  
Dec. 2001 – Jan. 2006

Epoch Well Services, Inc.  
Houston, TX

**Epoch Application Framework** (Project Architect, Developer, XP Coach)

- ❖ Designed an application framework to be used by all future desktop application projects.
- ❖ The Data Access Framework uses the **Hibernate EJB3** implementation for entity based data access.
- ❖ The **Hibernate EntityManager**, **Hibernate Annotations**, **JUnit** and **DbUnit** are used to perform unit testing.
- ❖ The Client Framework uses the **Eclipse Rich Client Platform**.
- ❖ Clients communicate with a central server using **web services**.
- ❖ Sold the concept of integrating an **agile process** with the **RUP** to management and led the effort to implement the process with this project. Using this process the team recently completed its first milestone on schedule.

**Real-Time Scroll Graph Project** (Project Architect, Developer, Project Lead)

- ❖ This project was the pilot project for the **Rational Unified Process**.
- ❖ Created the system architecture using ArgoUML, Visio and Rational Software Architect. Produced **UML** diagrams, a formal Software Architecture document and created all of the service interfaces specified in the architecture.
- ❖ Evaluated several remote service technologies including Java **RMI**, Caucho **Hessian** and **SOAP** web services using **JAX-RPC** and **Apache Axis**. Chose Hessian based on performance, ease of development and low overhead.
- ❖ The system is a thin-client Java application that graphs instrumentation data retrieved using web services from an **Oracle** database. **Hibernate** and **JDBC** are used on the server to retrieve the data. The **Spring Framework** is used heavily on the server side.
- ❖ The client is implemented in **Swing** and deployed using **Java WebStart**. Runs on Java 1.4.2 and 1.5.
- ❖ Created a **JSP** administration site that allows support technicians to view log files and restart services. This site uses **JDBC** to retrieve data and uses the **Spring Framework** heavily.
- ❖ All server side code is deployed in **JBoss 4** running on **RedHat Enterprise Linux 3** using Java 1.5.
- ❖ Oversaw consultants developing a 3D component with **Java3D**.
- ❖ Began contributing code when one of the developers left the company. Took over as **Project Lead** when the previous Lead was moved to another project.
- ❖ Led the project to a successful first release and followed up with a maintenance release shortly thereafter.
- ❖ Prepared project plans, supervised consultants and junior developers, met with stakeholders and provided project status to management. Performed code reviews and approved designs.

**Portal Project** (Project Architect)

- ❖ Evaluated portal and application server technologies. Application servers evaluated include **BEA WebLogic**, **IBM WebSphere** and **Oracle AS10g** as well as **PlumTree Portal**.
- ❖ Managed integration between this project and the Real-Time Scroll Graph project.

**Instrumentation Project** (Developer, Project Lead)

- ❖ Led a team to rewrite the C++ version of the application in **C#**. Implemented client/server communications using **TCP** sockets and **UDP** multicast. Database access was accomplished using **ADO.NET**, was targeted at **MySQL** and took advantage of database replication functionality. The application included an XML configuration system, a plug-in architecture and a touch-screen interface.
- ❖ Fixed several major issues in the original **C++** version of the instrumentation system.

**Mudlogging Projects** (Developer)

- ❖ Was solely responsible for maintaining complex **C++ MFC** applications for mudlogging. Fixed many long standing issues and added significant features. Significant refactoring was necessary to deal with poor design choices and lack of documentation from the original developers.

Oct. 2001 – Nov. 2001 **Consultant**  
Feb. 1999 – Sep. 2001 **Lead Software Developer**  
Aug. 1998 – Feb. 1999 **Programmer Analyst**  
Apr. 1998 – Sep. 1998 **MIS Director**  
Apr. 1997 – Apr. 1998 **System Analyst**  
Aug. 1995 – Apr. 1997 **Consultant**

Altra Energy Technologies	Houston, TX
Compression Engines	Houston, TX
Automated Internet Business Machines	Harrisburg, PA
Pennsylvania HealthMATE	Harrisburg, PA
AMP, Inc.	Harrisburg, PA
various clients	Carlisle, PA

**CERTIFICATIONS**

Sun Certified Java Programmer, April 2004