# Noel Weichbrodt

Lead GIS Developer at VSolvIT

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## Summary

Write pleasing, functional, elegant code in a small, sharp, agile team for interesting people.

## Specialties

I love writing APIs, interfaces, translations, and persistence layers using powerful concepts like functional composition, domain specific languages, and actors.

I love computer languages, most recently Scala, Javascript, T-SQL, R, LaTeX, HTML, CSS, & F#.

I love frameworks, especially useful ones like Lift, JQuery, Dojo, ESRI.js, Spring, and the Typesafe stack (Play, SLICK, Akka).

To me, everything is a system to be mastered and utilized.

## Experience

**GIS Developer Lead  at  VSolvIT**

2011  -  Present (1 year)

Geospatial web apps for U.S. Department of Agriculture Rural Development. Using maps to report & track poverty and money across rural America.

Technologies & Tools: Scala, Java, Javascript, C#, T-SQL, PL-SQL, Lift, Scalaquery, Scalatest, JQuery, Dojo, Mediator.js, JSON, arcgis.js, REST, Git, Maven, JUnit, Surefire, Eclipse, Visual Studio 2010, JBoss, Jetty, Tomcat, IIS7, Oracle Spatial, SQL Server 2008, ESRI ArcGIS Server, ESRI ArcGIS SDE,

**Software Developer  at  TASC**

December 2009  -  February 2011  (1 year 3 months)

Same tune, different conductor.

Technologies & Tools: C#, F#, Java, Javascript, JQuery, T-SQL, PL-SQL, XML, XSD, XSLT, REST, SOAP, Swing, Visual Studio 2010, SQL Server 2008, Oracle 9

**Software Developer  at  Northrop Grumman**

June 2006  -  December 2009  (3 years 7 months)

Writing web apps for the intelligence community.

Technologies & Tools: C#, Java, Javascript, JQuery, T-SQL, PL-SQL, XML, XSD, XSLT, REST, SOAP,

VB.Net, Visual Studio 2005, SQL Server 2005, Oracle 8

## Application Developer  at  Miller & Martin PLLC

June 2004  -  June 2006  (2 years 1 month)

I wrote software for a law firm.

Technologies & Tools: C#, Javascript, T-SQL, VB.Net, Visual Studio 2005, SQL Server 2005

## Bagpipe Editor in Chief  at  Covenant College

2002  -  2003  (1 year)

I edited a college newspaper

## Web Developer  at  Pendergraphics Design Group

1999  -  2001  (2 years)

Point man for leading a print-based ad agency into the early web age.

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## Honors and Awards

**TAP Award**

Northrop Grumman

July 2008

**TAP Award**

Northrop Grumman

February 2009

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## Projects

**BroadbandUSA.gov**

April 2011 to Present

Members:Noel Weichbrodt, Gregory Roberts, Terry Burns, Brian Dunn

Translate, redesign, and revamp a suite of GIS-dependent web applications to award and administer loans and grants for broadband access providers in the rural and poor areas of America. Translate project from a hodgepodge of old C#/ASP.NET and multiple back-end systems to a JVM-based web stack and ESRI GIS services. Remove the cruft, improve the functionality, and simplify the entire application.

**Code-Name Mongoose: Harmonizing Semantic Ontologies Through Automated Semantic Match Mapping and Persisted Crosswalk**

2010 to 2010

Members:Noel Weichbrodt

Updated a Java Swing-based GUI and associated .NET 4.0 SOAP web service that ingested metadata catalog XML Specification Documents, allowing the user to crosswalk two catalog mappings either manually in the

GUI or automatically utilizing cutting-edge semantic matching algorithms, and persisted those mappings across user sessions and catalog versions.

**Air Transport Logistics**
2009 to 2009
Members:Noel Weichbrodt

Modified the database schema and VB.NET API of the Consolidated Air Mobility Planning System to remove all dependencies and references to Social Security Numbers. Created beautiful semantic web forms for the Air Refueling Managements System.

**Jaigo**
September 2007 to January 2008
Members:Noel Weichbrodt

Co-wrote the world's first javascript go (the board game) engine.

**Mote Localization**
February 2008 to May 2008
Members:Noel Weichbrodt

Wrote a new Monte-Carlo class localization algorithm in Python to localize wireless sensors (running TinyOS 2 and programmed in nesC) on an installed, mapped network using only the radio link quality indicator.

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## Publications

**What may not be expected in a country of eternal light?**
Strange Loop 2012   September 23, 2012
Authors: Noel Weichbrodt

A retrospective on using DSLs while building GIS applications with Scala, Lift, JQuery, & ESRI. Also, Mary Shelley & Frankenstein.

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## Skills & Expertise

**Scala**
**Lift**
**JVM**
**JavaScript**
**CSS**
**HTML 5**
**Web Applications**
**C#**
**T-SQL**
**Programming Languages**
**LaTeX**

**Agile Methodologies**
**Software**
**HTML**
**F#**
**Code analysis**
**Java**
**XML**
**SQL**
**jQuery**
**Git**
**API**
**I can touch my nose with my tongue**
**ESRI**

## Education

**Washington University in St. Louis**
Master of Science, Computer Science, 2007 - 2012

**Covenant College**
B.A., Philosophy; B.A., Information & Computer Science, Philosophy, Computer Science, 2000 - 2004
Activities and Societies:  Maclellan Scholar, 2000-2004

## Interests

Alife, philosophy, soccer, books by people who have been dead for more than 1000 years.