

# Travis Brooks

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## Profile

I am an engineer with experience in both database design and software engineering. I am a collector of algorithms, data structures, and design patterns. I have been the builder of large parts of reasonably large systems, and I am also familiar with inheriting and maintaining legacy code written by many other people. I started writing software with Java in 1997, and moved on to C# in 2002.

I am looking for an environment that is devoted to creating quality software. If you've got a great project with cutting edge tech, and an interesting problem space where intellectually challenging problems just keep popping up I would very much appreciate learning more about it! I'm open to new ideas but my preferred development stack these days is Visual Studio 2008 + ReSharper, regular commits to a subversion repository, and continuous integration on every commit.

## Technical Proficiencies

- **Languages I'm proficient in**

C# 3.5, T-SQL, Haskell, Javascript, XHTML

I formerly used the following languages but am now out of practice to varying degrees: Java, F#, C, C++, Perl, Prolog, IDL (both the CORBA meaning and the vector oriented language), and Smalltalk.

- **Software that I use daily**

Visual Studio 2008, SQL Server 2008, IIS 7.0, Subversion, TortoiseSVN, NAnt, CruiseControl.NET, NUnit, ReSharper, Excel, Firebug

## Public Speaking

**May 30, 2009**      <http://portlandcodecamp.org> at Reed College

Lead a packed session titled "Haskell 101" teaching the basics of programming in the functional language Haskell.

## Major Conferences

**Sept 22-24 2008**      **ICFP**      **Victoria, BC, Canada**

International Conference on Functional Programming

**October 21-26 2006**      **OOPLSA**      **Portland**

Object Oriented Programming, Systems, Languages and Applications

## Career History

**May 2005-Present**      **BlueTech LLC**      **(C#, SQL, ASP.NET, MVC, AJAX)**

BlueTech is an XP shop; all important coding must be done in pairs and all development is test driven. BlueTech has two core products both based around the principle of bringing technology to the blue collar professional, BlueVolt (<http://www.bluevolt.com>) and FieldRanger (<http://www.fielldranger.com>). BlueVolt is an online learning management system focused on electrical manufacturers and distributors that want to

offer product training and career training to their employees. Its also a convenient way for electricians to take required course work to maintain license certification. FieldRanger is an online service for creating work orders and dispatching them to mobile phones and devices, and synchronizing the work orders back into each customers accounting system for speedy billing.

**Major accomplishments:**

- Added new features every iteration, usually lasting a week, involving everything from new database tables on the backend to CSS on the frontend and everything in between, and added new tests to cover these features (NUnit, Selenium).
- Helped port many, many lines of legacy C# and T-SQL code into working, tested software.
- Helped handle technical support issues as they arose and was on the 24/7 support rotation.

**2002-2005 Ninatek, Inc. (C#, SQL, ASP.NET, .NET Remoting)**

Ninatek designed and marketed a web based business intelligence tool (NLighTen) for analyzing "in the field" performance of durable products (primarily vehicles) by tracking warranty claims. NLighTen was built using C# and could attach to either Oracle or MS SQL2K databases.

**Major accomplishments:**

- I designed from scratch the ROLAP analytic engine that provided all the charts and metrics displayed throughout NLighTen. The engine was fairly sophisticated and high performance, capable of calculating hundreds of aggregations over 100K+ records on modest hardware in 20 seconds or less. The individual calculations were abstracted into components that were processed uniformly, allowing parallel processing.
- Created an early detection system for products falling out of historical bounds for reliability. This was the most complex component built for the analytic engine; it was based on the 2002 best paper from the statistics journal Technometrics. I wrote the code with the cooperation of the paper's author, Dr. Huaiqing Wu.
- Contributed significantly to database design and SQL generation.
- Authored three provisional patents as the inventor.

**2001-2002 The Canopy Database Project (VBA, SQL)**

Using a NSF grant I was able to research how software could benefit the environmental sciences, primarily forestry research in Oregon and Washington. This was part of a larger project involving researchers from The Evergreen State College, OGI, and OSU.

**Major Accomplishments:**

- Created a generalized database and entry system for field data metadata (like tree counts, etc.). The information could be viewed in reports or exported as XML.
- Created an Excel application that added special metadata sheets to workbooks and sent the data to a database.

**1998 DOE Undergraduate Research Fellow (Java)**

This was part of the Collaborative Electronic Notebook project  
<http://collaboratory.emsl.pnl.gov>.

**Major Accomplishments:**

- Built a Java/CORBA component to login and authenticate users to the notebook.
- Built a web based visual analysis server for Nuclear Magnetic Resonance data. Depending on the data, the viewer worked in either 2D or 3D mode. The viewer was a thin Java applet, while the file parsing and imaging server was built with the Interactive Data Language.

**Education**

M.S. Computer Science and Engineering –Data Intensive Systems (translation => databases, data analysis). Oregon Graduate Institute. <http://www.ogi.edu>

B.S. With focus in Computer Science and Engineering  
The Evergreen State College. <http://www.evergreen.edu>