

# Bill Wright

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## Profile

I have 37 years of industry experience, five as a digital hardware designer and another 32 in various software engineering positions. My only professional teaching experience (besides as a ski instructor) was teaching assembly language programming for one semester at Condie Junior College in Santa Clara, California. I've also taught various classes at work on testing and behavior-driven design.

Worked in industry as a software engineer with extensive development and automated testing background specializing in Groovy/Java and familiar with Python, Ruby, etc. in various forms of Agile Development. I've done some GUI development, including widget development in Smalltalk, but primarily have done server-side coding. Strong emphasis on Behavior Driven Development and Test Driven Development. Some management experience in that I grew a QA team from two to ten as team lead/manager until interviewing my own manager.

I'm an avid writer and have published a book (on climbing) and am working on another book on learning programming. I also write a biweekly piece for the local paper.

## Experience (just the last 23 years)

Adjunct Professor of Computer Science, University of Colorado Boulder, Boulder, CO -- June 2023 - July 2023

- Taught CSCI 3308: Software Engineering Tools and Methodologies

Senior Development Engineer, Oracle, Broomfield, CO — October 2015 — April 2022

- Senior Software Developer creating Java/Groovy microservices deployed to Mesos originally and later to a Kubernetes cluster on AWS servers.
- Use of Qubole (Hadoop), Hive, AWS SQS and SNS services, relational databases, and Docker containers.
- Some Python and some Javascript UI work.
- Expertise in test-driven design (TDD) and especially behavior-driven design (BDD) using Cucumber and I taught internal courses on these topics.

Senior Development Engineer, Tendril Networks, Boulder, CO — 2012 - June, 2015

- Architected the BDD infrastructure for the entire company. All of these tests ran against REST interfaces - no automated GUI testing.
- Created an entire automated, distributed QA test for our energy reports product which caught numerous product errors for a zero-error-tolerance client. This involved very nearly developing an alternative product implementation from external data sources and design specifications.
- Developed new features for a big-data, Hadoop, energy-reports product in Groovy, Java, and Pig. All classes had unit tests and all features had BDD scenarios.
- Taught an introductory programming class (in Ruby) to non-technical employees.

## QA Team Lead / Test Automation Engineer, Tendril Networks, Boulder, CO — 2007-2012

- Started as QA lead and grew the team from two to six before interviewing and recommending the hiring of a Director of Quality to be by direct boss.
- Started the use of formal test scripts using Excel at first and then Rally Software.
- Designed and implemented the deployment process for our server product, including the installation and configuration scripts.
- Wrote 50+ Groovy scripts to aid in testing our server. These were used company-wide to support all our installations and even run as “utility simulators” in our production deployments for five years.
- Worked in a continuous integration environment where check-ins to SCM (GIT of late) kicked off automated BDD/Junit tests in Jenkins. Projects used Maven for building and life-cycle and dependency management.
- Gave classes on how to maintain and support our server instance to internal employees from development and support.

## Principal Consultant, Red Planet Consulting, Boulder, CO — 2001-2007

- Worked on a variety of projects for clients around the US (and one client in South Africa) primarily dealing with upgrades or new applications for their Smallworld (GE GIS System) implementation. Most of this work was done in Magik – a proprietary language of Smallworld which is very similar to Smalltalk. Projects involved some GUI work, multi-threaded applications, database interaction, etc.
- Developed a Mobile Client – all in C# on the .Net platform for Cox Communications in Atlanta. The Smallworld data was extracted to a SQLite database. Functions allowed for searching for various objects, adding redlining edits to the map, and network tracing.
- Gave training courses on the Magik Programming Language, Smallworld Application Development, and Smallworld Administration, in addition to developing the course slides and labs.
- Designed and developed a White Space Management tool that automatically moved text around on a map so that it wouldn't conflict with other “obstacles” on the map. The tool was fully customizable and parameter-driven. Wrote a paper on this and gave a talk on it at the 2005 Smallworld Users Conference.
- Developed a mobile mapping client called FieldStorm™ to interface with GE's power outage management software. This software was developed in VB.Net and used XML to send messages to the server via MSMQ – Microsoft Message Queuing technology for communicating over an intermittent connection.

## Education

MS Electrical Engineering, Stanford University, Stanford, CA

BS Electrical Engineering/Computer Science, University of Colorado, Boulder, CO

## Skills

3-tier client/server architecture, browser-based clients, GUI development, big data map-reduce Hadoop/HDFS experience, including Oozie for job flow control and Pig for data processing coding, instructor and training course development, object-oriented design and development skills, web-based development with Groovy, JavaScript, Python, SQL, Java, VB.Net, C#, Smalltalk.

Continuous integration using Jenkins. Gradle build tools with past experience with Maven.

Past heavy use of Windows, but Linux/Mac has been my development OS since 2007.

Familiar with JIRA, Rally, Confluence project management tools.

Published author of a book (Speed Climbing), magazine articles, newspaper opinion pieces, and biweekly columnist for the Daily Camera -- the local paper.

Race Director and Founder of the Rattlesnake Ramble Trail Race since 2005