

# David Watson david@davidwatson.org

## Summary

I help teams design, develop, and deploy software using automation, iteration, and reflection to improve.

## Experience

### Software Engineering Specialist, Consultant, *Caterpillar* 2018-2020,

2021-present

- Prototyped ingestion, storage, and annotation as well as terrain visualization for Autonomy Group

### Member of Technical Staff, *Carnegie Mellon University* 2020

- Researched high performance computing, ML, and HCI for Emerging Technology Center (ETC)

### Senior Software Developer, *Realpage* 2016 - 2018

- Implemented crawler data pipeline using Python, PostgreSQL, Docker, and Kubernetes

### VP Product Development, *Wellbridge Health* 2015 - 2016

- Led design of Django REST JSON API using PostgreSQL to Ember Data on web and mobile

### VP Engineering, *Hire an Esquire* 2014

- Led engineering team through refactoring Python, Django, and PostgreSQL stack

### Senior Software Developer, *Forever* 2013 - 2014

- Wrote Python, Flask, MongoDB prototype, ported to Ruby on Rails, PostgreSQL

### Senior Engineer, *Smash* 2011 - 2012

- Designed and implemented conversational text systems and REST interfaces in python

### Software Development Manager, *Wellspring* 2010 - 2011

- Led DevOps approach to Selenium (CI) and Capistrano (CD)

### Project Engineer, *Applied Perception* 2008-2009

- Visualized XML sonar data in python, ported Microsoft C#.net Windows GUI to C++/Qt/Linux

### UI Software Engineer, *Nomos* 2006 - 2007

- Prototyped wireframes and storyboards in C++/Qt for adaptive 4D treatment planning

### Software Design Engineer, *MAYA* 2004 - 2006

- Implemented AJAX backends in python/non-relational DB and a wireless lighting system in C# for Philips

**Co-Founder, *Cobind* 2003 - 2004**

- Co-founded custom Linux tools startup after winning Idea Foundry Fellowship

**Senior Software Engineer, *Management Science Associates* 2000-2003**

- Implemented product import systems providing Excel VBA API from spreadsheet to database

**Member of Technical Staff, *CA* 1995-2000**

- Coded C++ on Automation Point, Raveler, and Unicenter at Legent, Platinum, and CA, respectively

**Programmer-Analyst, *Mellon* 1992-1995**

- Wrote C++ on OS/2 for Executive Workbench asset management product

**Programmer-Analyst, *USX* 1990-1992**

- Implemented C/C++ HLLAPI programs on OS/2 to automate data center ops from a networked PC

**Education**

- Bachelor of Science, *Duquesne University* 1991