

**David Watson**



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What code and music share is that both result from consciousness and context beyond mere language. Indeed, in terms of language, one is logical and intentional, while the other, merely emotional. Data centers became Fordist footnotes when software's postmodern extensibility enveloped and commodified the data center in its wake. Startups became my default mode. Tamed prototype design, product development, and platform deployment as angels morphed into VC's on the way to M&A.

## Knowledge and Skills

Platforms	Languages	Databases	Containers & VMs
Linux MacOS Windows	C/C++ HTML/CSS/JS Python	Postgres SQLite Redis	Docker Kubernetes Proxmox
Architecture	Integration (CI)	Deployment (CD)	Frameworks
API GUI HCI	Jenkins Circle CI GitOps	Aptible Capistrano Shippable	Django Flask Rails

## Experience (W-2)

**Software Engineering Specialist**      [Caterpillar](#)      2018-2020

- Design and deliver innovative infrastructure to support the company's autonomous vehicles
- Collaborated with IT to transform data storage provisioning from data center to cloud to cloud native
- Improved forward progress moving prototype toward shipping product

**Senior Software Developer**      [Rent Jungle](#)      2016-2018

- MVP in production challenged growing client demands with unsustainable devops opportunity costs
- Designed crawler data pipeline in Docker/Kubernetes on Mac to AWS Python/Postgres & MySQL
- Managed daily sessions with team to establish cadence, pairs work, and engineering confidence

**VP Product Development**      [Wellbridge Health](#)      2015-2016

- MVP supported pilots, but MVP was not market-ready for production deployment
- As CISO, IT Director, and VP Product, deprecated MVP; designed and built behavioral health platform
- Designed and built Django/Postgres API plus Aptible deployment while MAYA completed UX SPA

**Senior Software Developer**      [Forever](#)      2013-2014

- Series A startup with concept to provide digital storage for *100 years*
- Prototyped MVP in Python, Flask, Mongo; Wrote production system in Ruby/Rails on Heroku/Postgres
- Forever continues to sell storage product while integrating complementary assets via M&A

**Senior Engineer**      [SMAsh](#)      2011-2012

- Juggled customer service & support from Pittsburgh Steelers to Miller Coors plus new development
- Built conversational text interface to track diabetic glycemia in Python/Flask/Postgres, and Heroku
- Worked through a funding shortage and company was eventually acquired by Mind Matrix

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|---|--------------------------------------|-----------|
| <b>Software Development Manager</b>   | <a href="#">Wellspring Worldwide</a> | 2010-2011 |
| <ul style="list-style-type: none"> <li>▪ Wellspring had a million lines of code in its product, but no tests or automation and legacy date center</li> <li>▪ Transformed legacy ops from data center to automated CI/CD test, build, and deployment pipeline</li> <li>▪ Wellspring is still operating independently today after moving from Pittsburgh to Chicago</li> </ul>  |                                      |           |
| <b>Project Engineer</b>   | <a href="#">Applied Perception</a>   | 2008-2009 |
| <ul style="list-style-type: none"> <li>▪ Applied Perception built nascent robotics for military clients</li> <li>▪ Ported C# GUI to Linux <a href="#">OCU</a> C++/Qt; Coded Python XML sonar parser/viz to bridge C++ GUI to <a href="#">UUV</a></li> <li>▪ Applied Perception was first acquired by Foster-Miller, then Foster-Miller was acquired by QinetiQ</li> </ul>   |                                      |           |
| <b>UI Software Developer</b>  | <a href="#">Nomos</a>                | 2006-2007 |
| <ul style="list-style-type: none"> <li>▪ Nomos built radiotherapy treatment planning hardware and software products on Mac OSX</li> <li>▪ Wrote C++ QA tests for Corvus radiation oncology product; Prototyped 4D design in C++/Qt</li> <li>▪ Nomos was acquired by North American Scientific, then acquired by Best Medical.</li> </ul>  |                                      |           |
| <b>Software Design Engineer</b>   | <a href="#">MAYA Design</a>          | 2004-2006 |
| <ul style="list-style-type: none"> <li>▪ MAYA was a design studio and technology research lab founded by 3 CMU professors circa 1989</li> <li>▪ Built AJAX stack on Linux &amp; Mac Python and NoSQL DB; built predecessor to Hue C#.net for Philips</li> <li>▪ MAYA was acquired by BCG and operates today as BCG Platinion</li> </ul>   |                                      |           |
| <b>Co-Founder</b>   | <a href="#">Cobind</a>               | 2003-2004 |
| <ul style="list-style-type: none"> <li>▪ Conceived, marketed and launched startup to build custom Linux distros online</li> <li>▪ Designed, built, and shipped the <a href="#">Cobind Desktop</a> - PoC of the DIY build tools</li> <li>▪ Reached a worldwide audience quickly using free media and our website via word-of-mouth marketing</li> <li>▪ Failed fast when we realized that founding delivered more epiphanies and insights than any formal education</li> </ul> |                                      |           |

## Experience (1099)

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|---|---------------------------------|------|
| <b>Technical Consultant</b>   | <a href="#">Caterpillar</a>     | 2021 |
| <ul style="list-style-type: none"> <li>▪ Built and profiled terrain visualization C++ code ported from Intel to Xilinx <a href="#">ZCU-104</a></li> </ul> |                                 |      |
| <b>Technical Consultant</b>   | <a href="#">TenthRow</a>        | 2009 |
| <ul style="list-style-type: none"> <li>▪ Designed and built <a href="#">live music experience</a> via streaming to fans worldwide</li> </ul>              |                                 |      |
| <b>Usability Consultant</b>   | <a href="#">MAYA Design</a>     | 2008 |
| <ul style="list-style-type: none"> <li>▪ Collaborated with MAYA Design on usability of Bayer Diabetes Blood Sugar Monitor</li> </ul>                      |                                 |      |
| <b>Technical Consultant</b>   | <a href="#">Zenit Solutions</a> | 2008 |
| <ul style="list-style-type: none"> <li>▪ Designed and implemented python system to track movers via <a href="#">PostGIS</a> and web2py</li> </ul>         |                                 |      |

## Education and Awards

- |          |                                     |              |   |
|----------|-------------------------------------|--------------|---|
| Duquesne | <a href="#">Bachelor of Science</a> | InfoWorld    | <a href="#">Top 100 Award</a>             |
| MIT (CE) | <a href="#">RDBMS and IAP</a>       | Idea Foundry | <a href="#">Transformation Fellowship</a> |