

David Watson



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Summary

My computer science **merit award** set the stage to finish my education as a music school dropout.

Finished the **BS** at night while a data center programming **internship** ignited my passion for software.

After college graduation, honed my craft **automating operations, developing user interfaces, and managing Unix systems**.

As the **Unix** sun set on my first decade, the **Linux** sun rose as a **fellowship** catalyzed my startup, Cobind.

Roles from **rapid prototyping** to **automated deployment** to **remodeling complete systems** followed.

Process is sensemaking borne of shrinking timelines, shifting roles, and increasing complexity.

Labels like **agile, action learning, or lean** are just cultural symbols of a team that reflects together, learns together, adapts together; gels together, scales together, and stays together. The most important qualities are team uniqueness, flow-enhancement, and sustainably safe.

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 dands 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 providigital 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 glycia in Python/Flask/Postgres, and Heroku
- Worked through a funding shortage and company was eventually acquired by Mind Matrix

Software Development Manager [Wellspring Worldwide](#) 2010-2011

- Wellspring had a million lines of code in its product, but no tests or automation and data center
- Transformed ops from fire-fighting to automated CI/CD pipeline on Capistrano, Mechanize, and Selenium
- Wellspring is still operating independently today after moving from Pittsburgh to Chicago

Project Engineer [Applied Perception](#) 2008-2009

- Applied Perception built nascent robotics for military clients
- Ported C# GUI to Linux OCU in C++/Qt; Coded Python XML sonar parser/viz to bridge C++ GUI to UUV
- Applied Perception was first acquired by Foster-Miller, then Foster-Miller was acquired by QinetiQ

UI Software Developer [Nomos](#) 2006-2007

- Nomos built radiotherapy treatment planning hardware and software products on Mac OSX
- Wrote C++ QA tests for Corvus radiation oncology product; Prototyped 4D design in C++/Qt
- Nomos was acquired by North American Scientific, then acquired by Best Medical.

Software Design Engineer [MAYA Design](#) 2004-2006

- MAYA was a design studio and technology research lab founded by 3 CMU professors circa 1989
- Built AJAX stack on Linux & Mac Python and NoSQL DB; built predecessor to Hue C#.net for Philips
- MAYA was acquired by BCG and operates today as BCG Platinion

Co-Founder [Cobind](#) 2003-2004

- Conceived, marketed and launched startup to build custom Linux distros online
- Designed, built, and shipped the Cobind Desktop - PoC of the DIY build tools
- Reached a worldwide audience quickly using free media and our website via word-of-mouth marketing

Experience (1099)

Technical Consultant [Caterpillar](#) 2021

- Built and profiled terrain visualization C++ code ported from Intel to Xilinx ZCU-104

Technical Consultant [TenthRow](#) 2009

- Designed and built [live music experience](#) via streaming to fans worldwide

Usability Consultant [MAYA Design](#) 2008

- Collaborated with MAYA Design on usability of Bayer Diabetes Blood Sugar Monitor

Technical Consultant [Zenit Solutions](#) 2008

- Designed and implemented python system to track movers via PostGIS and web2py

Education and Awards

Duquesne [Bachelor of Science](#)
MIT (CE) [RDBMS and IAP](#)

InfoWorld [Top 100 Award](#)
Idea Foundry [Transformation Fellowship](#)