

David(e)o? Watson

Creating software from ideas to code, data to science, and dialog boxes to documentation in usable products and shipping services.

📍 Pittsburgh, PA | 📞 (412) 614-9301 | @ david@davidwatson.org | 🔗 LinkedIn Github: <https://github.com/davidthewatson/>

Summary

A **computer science** award and a **computer programming** internship bookended music school. A foundation in software engineering grew from startups founded by professors, data centers, or the school itself. Rapid design, development, and deployment flowed from ideas shaping prototypes, prototypes shaping products and services, or all of the above. Flexible individuals yield agile teams.

Experience

Wyvern 🌐

2023-2024

Technical Consultant (1099)

Nashua, NH

- Software Architecture, IT Practice, and theory around Deno, Docker Compose, Kubernetes, Node, TypeScript, and beyond

Freelance 🌐

2022

Design Engineer

Pittsburgh, PA

Prototyped concepts on Personal Knowledge Management around GPT with my friend from Catapult at an urban coffee shop.

Caterpillar 🌐

2021

Technical Consultant (1099)

Pittsburgh, PA

Built C++/GCC/Linux code ported from Intel to ZCU-104 MPSoC on PYNQ using FPGA compiler flags for 20%-50% performance gains.

Carnegie Mellon University (Emerging Technology Center) 🌐

2020

Senior Member of Technical Staff

Pittsburgh, PA

- Artificial Intelligence (AI), Human Computer Interaction (HCI), High Performance Computing (HPC)

Caterpillar 🌐

2018-2020

Software Engineering Specialist (W-2)

Pittsburgh, PA

- Assembled Sensor Storage for Edge Network on Kubernetes using Python 3, Minio, and PostgreSQL with a team of 4 engineers
- Collaborated with 12 IT execs on planning and long-term implications of hyperconverged infrastructure on cloud native storage

Rent Jungle (RainMaker (RealPage)) 🌐

2016-2018

Senior Software Engineer

Pittsburgh, PA

- Led weekly retro to 2x better cadence, communication, velocity, and teamwork
- Crafted Scrapy/Tor (python 3) crawler on Django, PostgreSQL, Kubernetes

Wellbridge Health 🌐

2015-2016

VP Product Development, IT Compliance Officer

Pittsburgh, PA

- Led 4-person interdisciplinary design team through Ember SPA MVP designed and delivered in collaboration with MAYA Design
- Developed API backend on Python 3 - Django REST Framework, PostgreSQL emitting JSON API to Ember SPA on Aptible with 3 IC

Hire an Esquire (Major, Lindsey, and Africa) 🌐

2014

VP Engineering

Pittsburgh, PA

- Led a team of 6 through a lean Python 3 redesign and refactoring of the entire UI/UX from legacy MVP Django system
- Reduced daily production firefighting by more than 50% using nimble methods, automated tests, CI/CD, code and design review

Experience (continued)

Forever 🌐

2013-2014

Senior Software Developer

Pittsburgh, PA

- Prototyped full-stack (Bootstrap to Heroku) cloud idea in 2 weeks on Python 3 before porting MVP from Python to Ruby on Rails
- Enabled the company to capture strong market traction in under a year after releasing 1.0 e-commerce platform finished at Neo

SMaSh - Brainstorm SMS Technologies (Mind Matrix) 🌐

2011 - 2012

Senior Engineer

Pittsburgh, PA

- Wrote conversational text systems (like twilio) in Python/PostgreSQL
- Supported large SMS text campaigns from Pittsburgh Steelers to Miller-Coors

Wellspring Worldwide 🌐

2010-2011

Software Development Manager

Pittsburgh, PA

- Pioneered SRE culture from legacy data center to SaaS VMWare CI/CD modernization with a team of 12 Engineers
- Built DevOps systems using Capistrano (Ruby), Mechanize (Python), and Selenium with team of 4-7 engineers

Applied Perception (Foster Miller (Qinetiq)) 🌐

2008-2009

Project Engineer

Pittsburgh, PA

- Visualized XML sonar data in python backend/C++ GUI application on Windows
- Ported Microsoft C#.net Windows GUI to C++/Qt/Linux for OCU deployment

NOMOS (North American Scientific, Best Medical) 🌐

2006-2007

UI Software Engineer

Pittsburgh, PA

- Coded C++ QA tests and maintained Perl code review system on CORVUS FDA-regulated radiotherapy product with team of 12-16
- Prototyped wireframes and rendered storyboards in C++/Python2/Qt for adaptive 4D treatment planning with team of 4

MAYA Design (BCG) 🌐

2004-2006

Software Design Engineer

Pittsburgh, PA

- Built python 2 REST server emitting JSON for JDA AJAX clients on dev team of 4 building dhs.net, A+ Schools, and 3RC websites
- Demoed drag&drop GUI wireless lighting IoT Zigbee PoC in C#.net/COM/Visio on Windows for Lutron/Phillips execs in 5 days

Cobind 🌐

2003-2004

Cofounder

Pittsburgh, PA

- Borrowed cobind concept from research signifying binding an app with its OS cooperatively and declaratively (like embedded)
- At the time, Redpath, Suse, and Timesys could build custom linux, albeit embedded. Spoke to Ian Murdock about Progeny too.
- Collaborated on Linux Tools startup with cofounder and consultant. Received worldwide press after Idea Foundry Fellowship.

Awards

Top 100 Award (MAYA Design)

Infoworld 🌐

Transformation Fellowship (Cobind)

Idea Foundry 🌐

Education

Duquesne University 🌐

BSBA

Coursework

Computer Science, Decision Science, Music Education, Systems Analysis, Technical Writing

Passion: Diet, Exercise, Reading, Writing, and Running