

Dav(id|e|o)? Watson

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

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Summary

Flexible individuals yield agile teams. A **computer science** award and a **computer programming** internship bookended music school. Beyond college, cofounded a startup, joined MAYA, and crafted software as an employee and later a stakeholder for a decade. Design thinking flowed from ideas, prototypes, and tools that shaped product development and service deployment.

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

Caterpillar 🌐

2021

Technical Consultant (1099)

Pittsburgh, PA

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

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

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

- Responsible for Sophia and Flintbox product development, deployment, and support
- Led team of 12 from slow legacy data center of > 1M SLOC to fast, automated SaaS virtualization of CI/CD, DevOps, and SRE
- Prototyped systems using Capistrano (Ruby), Mechanize (Python), and Selenium with team of 4-7 software 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

- Deployed python web services emitting JSON to JDA clients on team of 4 developing A+ Schools, 3RC, DHS to win an award
- Demoed GUI lighting IoT Zigbee PoC in C#.net/COM/Visio on Windows for Phillips execs in 5 days sketch-to-code

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

Education

Duquesne University 🌐

BSBA

Coursework

Computer Science, Music Education, Systems Analysis, Technical Writing

Passion Fasting, Reading, Writing, Running, and Feasting