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Summary

I help teams design, develop, and deploy software. I've evolved the process from years of proprietary and open source work in R&D labs and startups from data center to virtualization to cloud native.

My teams have shipped products by defining, designing, and reflecting, then iterating, evolving, and automating until shipping tags a complete product and the process begins again.

I enjoy working with small, peer teams on emergent technology where organic complexity is high enough that the team's only choice is to reduce synthetic complexity through thoughtful design choices.

Experience

Software Engineering Consultant, *Caterpillar* 2018-2020, 2021-present

- Contributed code and process to multiple projects within autonomy group
- Designed and developed ingestion, storage, and annotation of CV and ML data

Member of Technical Staff, *Carnegie Mellon University* 2020

- Contributed to Emerging Technology Center within Software Engineering Institute
- Work included HPC, ML, and HCI

Senior Software Developer, *Realpage* 2016 - 2018

- Contributed code and process to software engineering team
- Implemented crawler data pipeline using Python, PostgreSQL, Docker, and Kubernetes

VP Product Development, *Wellbridge Health* 2015 - 2016

- Led development team through replacement of legacy prototype with new product
- Designed and implemented REST API using DRF and PostgreSQL on web and mobile

VP Engineering, *Hire an Esquire* 2014

- Led engineering team from rough prototype to mature product
- Refactored Python, Django, and PostgreSQL stack

Senior Software Developer, *Forever* 2013 - 2014

- Contributed code from prototype to product
- Wrote Python, Flask, MongoDB prototype, productionized Ruby on Rails, PostgreSQL

Senior Engineer, *Smash* 2011 - 2012

- Contributed code to internal systems supporting daily operations
- Designed and implemented conversational text systems and REST interfaces in python

Software Development Manager, *Wellspring* 2010 - 2011

- Led development team from legacy data center to SaaS virtualization
- Prototyped DevOps (CI/CD) approach using Capistrano, Mechanize, and Selenium

Project Engineer, *Applied Perception* 2008-2009

- Contributed code to teams working on military robotics projects (DARPA)
- Visualized XML sonar data in python, ported Microsoft C#.net Windows GUI to C++/Qt/Linux

UI Software Engineer, *Nomos* 2006 - 2007

- Contributed code, tests, and review to several radiation oncology software products
- Prototyped wireframes and storyboards in C++/Qt for adaptive 4D treatment planning

Software Design Engineer, *MAYA* 2004 - 2006

- Contributed design, analysis, and code across numerous consulting projects
- Coded AJAX backends in python and a wireless lighting system in C# for Philips

Co-Founder, *Cobind* 2003 - 2004

- Partnered on ideation, vision, and execution of custom Linux Tools startup
- Received wide press acclaim around products after winning Idea Foundry Fellowship

Senior Software Engineer, *MSA* 2000-2003

- Contributed code, data, and deployment before and after startup acquisition
- Implemented product import systems providing Excel VBA API from spreadsheet to database

Member of Technical Staff, *CA* 1995-2000

- Contributed code to Automation Point, Raveler, and CA-Unicenter products
- Coded C++ GUI code for Legent and Platinum, before and after CA acquisition

Programmer-Analyst, *Mellon* 1992-1995

- Contributed code to Executive Workbench asset management product
- Implemented multi-threaded, event-driven C++ GUI code on OS/2

Programmer-Analyst, *USX* 1990-1992

- Contributed code to internal data center systems automation
- Automated data center operations in C/HLLAPI on OS/2 from a networked PC

Education

- Bachelor of Science, *Duquesne University 1991*