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Summary

Designing, developing, and deploying software from feasible prototype to shippable product to viable profit.

Objective

Shape software with a reflective team of caring collaborators sharing common aesthetics, methods, and tools.

Knowledge and Skills

Platforms	Languages	Databases	Containers & VMs
Linux	C/C++	Postgres	Docker
MacOS	HTML/CSS/JS	SQLite	Kubernetes
Windows	Python	Redis	Proxmox

Architecture	Integration (CI)	Deployment (CD)	Frameworks
API	Jenkins	Aptible	Django
HCI	Circle CI	Capistrano	Flask
LXC/KVM	GitOps	Shippable	Rails

Experience (Primary)

Software Engineering Specialist	Caterpillar	2018-2020

Designed storage system on Kubernetes; Worked with IT to make provisioning private cloud infrastructure feasible

Senior Software Developer	Rent Jungle	2016-2018

Coded crawler data pipeline from Docker and Kubernetes on Linux & Mac to AWS in Python with Postgres & MySQL

VP Product Development	Wellbridge Health	2015-2016

Led product development team from MVP to telehealth sensor system in Python, Flask, Django, Postgres, and Aptible

Senior Software Developer	Forever	2013-2014

Prototyped MVP in Python, Flask, NoSQL; Ported system to Ruby/Rails/Postgres for production deployment on Heroku

Senior Engineer	SMaSh	2011-2012

Built conversational text interface to track blood glucose for diabetes patients in Python, Flask, Postgres, and Heroku

Software Development Manager	Wellspring	2010-2011

Transformed legacy ops from data center to automated CI/CD SaaS deployment cutting daily support to near zero

Project Engineer	Applied Perception	2008-2009

Ported C#.net GUI to Linux OCU in C++/Qt; Programmed Python XML sonar parser/viz between C++ GUI & HULS

UI Software Engineer	Nomos	2006-2007

Automated QA tests in C++ for Corvus radiation oncology product; Prototyped adaptive 4D radiotherapy in C++/Qt

Software Design Engineer	MAYA Design	2004-2006

Developed web stack on Linux & Mac in Python and NoSQL database; built predecessor to Hue in C#.net for Philips

Co-Founder	Cobind	2003-2004

Won an Idea Foundry Transformation Fellowship; launched DIY Linux Tools startup; built custom Linux distros online

Awards

Infoworld	Top 100 Award	Design and delivery of MAYA's DHS humanservices.net project
Idea Foundry	Transformation Fellowship	Startup (Cobind) Seed Investment and Entrepreneurial Support

Experience (Secondary)

Consultant   [Caterpillar]   2021

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

Senior Member of Technical Staff   [Carnegie Mellon]   2020

At SEI, collaborated with groups from ATAK, Intel and NREC supporting projects like AI, HCI, and HPC in C++ and Python

VP Engineering   [Hire an Esquire]   2014

Led redesign, refactoring, and deployment of ground-up demolition of legacy Python, Django, Postgres web stack

Consultant   [TenthRow]   2009

Designed and built TenthRow - a web-based system to deliver a[live music experience] via streaming to fans worldwide

Consultant   [MAYA Design]   2008

Colaborated with MAYA Design on usability of Bayer Diabetes Glycemic Monitor

Consultant   [Zenit Solutions]   2008

Designed and implemented python reporting system in web2py and postgresql to track movers via PostGIS and web2py

Open Source

Programmer [Github Issues Report]   Coordinated code and configuration from the team at Rent Jungle
Programmer [BodyTrace API], [PostgREST] Authored BodyTrace API and PostgREST client-server in Wellbridge Health JSON-API
Programmer [Marquee]   Contributed servlet implementation to Marquee XML-RPC library

Quotes From Coworkers 💬

💬 His skills as a top-notch technical author makes him a great collaborator.

💬 He has a genuine interest in nurturing and mentoring others to help them achieve their goals.

💬 His sense of business, technology, and insights into usability makes him a great team member.

💬 What impresses me most is his curiosity, critical thinking, and commitment to continued learning.

Education and Learning

Duquesne   [Bachelor of Science]
Github   [Git Foundations Workshop]
PyCon   [Python] [Conference]
RDBMS and Internet Application Programming   [MIT (CE)]