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## Summary

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

## Objective

Craft software with a caring, daring, reflective team of creatives sharing common [aesthetics](#), [methods](#), and [tools](#).

## Knowledge and Skills

Platforms/th>	Language	Database	Cloud
Linux MacOS Windows	C/C++ HTML/CSS/JS Python	Postgres SQLite Redis	Docker Kubernetes Proxmox
Architecture	Integration (CI)	Deployment (CD)	Frameworks
API HCI LXC/KVM	Jenkins Circle CI GitOps	Aptible Capistrano Shippable	Django Flask Rails

## Long-Term Experience

**SW Eng. Specialist** [Caterpillar](#) 2018-2020  
Designed storage system on Kubernetes; Worked with IT to make provisioning private cloud infrastructure feasible

**Sr. SW Dev.** [Rent Jungle](#) 2016-2018  
Coded crawler data pipeline from Docker and Kubernetes on Linux & Mac to AWS in Python with Postgres & MySQL

**VP Product Dev.** [Wellbridge Health](#) 2015-2016  
Led product development team from MVP to telehealth sensor system in Python, Flask, Django, Postgres, and Aptible

**Senior SW Dev.** [Forever](#) 2013-2014  
Prototyped MVP in Python, Flask, NoSQL; Ported system to Ruby/Rails/Postgres for production deployment on Heroku

**Senior Eng.** [SMaSh](#) 2011-2012  
Built conversational text interface to track blood glucose for diabetes patients in Python, Flask, Postgres, and Heroku

**SW Dev. Mgr.** [Wellspring](#) 2010-2011  
Transformed legacy ops from data center to automated CI/CD SaaS deployment cutting daily support to near zero

**Project Eng.** [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 SW Eng.** [Nomos](#) 2006-2007  
Automated QA tests in C++ for Corvus radiation oncology product; Prototyped adaptive 4D radiotherapy in C++/Qt

**SW Design Eng.** [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

**Sr. SW Eng.** [Management Science Associates](#) 2000-2003  
Created VBA plugin enabling remote product import over SOAP protocol from Microsoft Excel to product database

**Principal MTS** [CA, Legent, Platinum](#) 1995-2000  
Wrote GUI features (CMS, NMS) in C++ on Windows and OS/2 for Automation Point, Raveler, and Unicenter products

## Short-Term Experience

<b>Consultant</b>	<a href="#">Caterpillar</a>	2021
Built and profiled terrain visualization C++ code ported from Intel to Xilinx <a href="#">ZCU-104</a>		
<b>Sr. MTS</b>	<a href="#">Carnegie Mellon</a>	2020
At SEI, collaborated with groups from ATAK, Intel and NREC supporting projects like AI, HCI, and HPC in C++ and Python		
<b>VP Eng.</b>	<a href="#">Hire an Esquire</a>	2014
Led redesign, refactoring, and deployment of ground-up demolition of legacy Python, Django, Postgres web stack		
<b>Sr. SW Eng.</b>	<a href="#">PPG</a>	2007
Member of team building and shipping C++ code for Spectrophotometer used in 40,000 body shops		
<b>Consultant</b>	<a href="#">Zenit Solutions</a>	2008
Designed and implemented python reporting system in web2py and postgresql to track movers via PostGIS and web2py		
<b>Consultant</b>	<a href="#">TenthRow</a>	2009
Designed and built TenthRow - a web-based system to deliver a <a href="#">live music experience</a> via streaming to fans worldwide		
<b>Consultant</b>	<a href="#">MAYA Design</a>	2008
Colaborated with MAYA Design on usability of Bayer Diabetes Glycemic Monitor		






## Awards

<b>Infoworld</b>	Top 100 Award	2006
Design and delivery of MAYA's DHS humanservices.net project		
<b>Idea Foundry</b>	Transformation Fellowship	2003
Startup (Cobind) Seed Investment and Entrepreneurial Support		

## Open Source

<b>Programmer</b>	<a href="#">Github Issues Report</a>	2017
Coordinated code and configuration from the team at Rent Jungle		
<b>Programmer</b>	<a href="#">BodyTrace API</a> , <a href="#">PostgREST</a>	2015
Authored BodyTrace API and PostgREST client-server in Wellbridge Health JSON-API		
<b>Programmer</b>	<a href="#">Marquee</a>	2003
Contributed servlet implementation to Marquee XML-RPC library		

## Quotes From Coworkers

-  He genuinely cares about the users of systems he's building.
-  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 collaborator.
-  He's more like a music producer than the typical software engineer.
-  He's smart, dedicated and diligent.

## Education and Learning

<b>PyCon</b>	Python Conference	<a href="#">2018-2019</a>
<b>Github</b>	<a href="#">Git Foundations Workshop</a>	2012
<b><a href="#">RDBMS and Internet Application Programming</a></b>	MIT (CE)	2012
<b>Duquesne</b>	Bachelor of Science	1991