David Watson (412) 376-7565



Shaping software aesthetics, methods, and tools by reflectively bridging the gap from prototype-feasability to platform-viability.

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 (W-2)

Software Engineering Specialist	<u>Caterpillar</u>	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			
Roles included CISO, IT Director, and VP Product from MVP to behavioral health platform in Django, Postgres, and Aptible					
Senior Software Developer	<u>Forever</u>	2013-2014			
Prototyped MVP in Python, Flask, NoSQL; Ported system to Ruby/Rails/Postgres for production deployment on Heroku					
Senior Engineer	<u>SMaSh</u>	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	<u>Nomos</u>	2006-2007			
Automated QA tests in C++ for Corvus radiation oncology product; Prototyped and storyboarded 4D design in C++/Qt					
Software Design Engineer	MAYA Design	2004-2006			
Developed AJAX stack on Linux & Mac in Python and NoSQL database; built predecessor to Hue in C#.net for Philips					
Co-Founder	<u>Cobind</u>	2003-2004			

Experience (1099)

Technical Consultant	<u>Caterpillar</u>	2021			
Built and profiled terrain visualization C++ code ported from Intel to Xilinx ZCU-104					
Usability Consultant	MAYA Design	2008			
Colaborated with MAYA Design on usability of Bayer Diabetes Blood Sugar Monitor					
Technical Consultant	<u>TenthRow</u>	2009			
Designed and built a live music experience via streaming to fans worldwide					
Technical Consultant	Zenit Solutions	2008			
Designed and implemented python system to track movers via PostGIS and web2py					

Education and Awards

Duquesne	Bachelor of Science	Infoworld	Top 100 Award
MIT (CE)	RDBMS and IAP	Idea Foundry	Transformation Fellowship