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Objective

Help small teams deliver reliable, usable, and valuable software using incremental, reflective, and minimal process.

Summary

Helped design, develop, and deploy software across desktop, internet, and mobile platforms.

Skills

Operating Systems & Programming Languages

Productive working on Linux (Unix-like), MacOS (BSD), and Windows (WSL2) since they have similar [GUI](#) and [CLI](#).

Since 2005, wrote Python daily, C++ or Ruby occasionally. Prior to 2005 wrote C++ daily, Python or Ruby occasionally.

Containers & Virtual Machines

Used Docker since 2015, Kubernetes since 2017, and VMWare since 2000.

Markup & Markdown

Prefer markup, markdown, or plain text for a variety of technical documentation, including this resume.

Databases & Methods

Used PostgreSQL since 2008 for its support for relational and schemaless data plus numerous extensions.

Tailored [agile](#) based on a synthesis of research from [Alistair Cockburn](#), [Allen Holub](#), and [Bonnitta Roy](#).

Experience

Software Engineering Specialist [Caterpillar](#) 2018-2020, 2021

- Built, reviewed and profiled C++ code on Linux from Intel x86 to ARM for Autonomy Group
- Guided company-wide directives on docker container usage for build engineering and CI/CD on Azure

Member of Technical Staff [Carnegie Mellon University](#) 2020

- Contributed to Emerging Technology Center within Software Engineering Institute
- Worked on HPC, MLOps, and HCI in concert with National Robotics Engineering Center

Software Developer [Realpage](#) 2016 - 2018

- Led weekly retrospectives to improve cadence, velocity, and teamwork
- Implemented crawler data pipeline using Python, Django, PostgreSQL, Docker, and Kubernetes/AWS

VP Product Development [Wellbridge Health](#) 2015 - 2016

- Led development team through HIPAA-compliant [MVP](#) with SPA UX design from MAYA
- Implemented REST API using Python/Django, [DRF](#) and PostgreSQL serving EmberJS SPA on Aptible

VP Engineering [Hire an Esquire](#) 2014

- Led engineering team to redesign and simplify [MVP](#)
- Refactored Python, Django, and PostgreSQL stack with vanilla Django and Bootstrap frontend

Software Developer [Forever](#) 2013 - 2014

- Wrote Python, Flask, MongoDB proof-of-concept demonstrating photo sharing and storage on Heroku
- Productionized design using Ruby on Rails, PostgreSQL, AWS

Software Engineer [BrainStorm](#) 2011 - 2012

- Contributed python, postgreSQL code to internal systems supporting daily operations
- Designed and implemented conversational text systems (like twilio) and REST interfaces in python

Software Development Manager [Wellspring](#) 2010 - 2011

- Led devops from legacy data center to SaaS VMWare deployment
- Built CI/CD systems using Capistrano (Ruby), Mechanize (Python), and Selenium

Project Engineer [Qinetiq](#) 2008-2009

- Visualized XML sonar data in python, consumed by C++ GUI application on Windows
- Ported Microsoft C#.net Windows GUI to C++/Qt/Linux for OCU deployment

UI Software Engineer [Nomos](#) 2006 - 2007

- Contributed C++ QA tests and code reviews to CORVUS FDA-regulated radiation oncology product
- Prototyped wireframes and rendered storyboards in C++/Qt for adaptive 4D treatment planning

Software Design Engineer [MAYA Design](#) 2004 - 2006

- Built REST backends in python emitting JSON for consumption by proprietary AJAX frontends
- Demoed GUI floorplan wireless lighting designer in C#/Windows for Lutron 1 week from sketch

Co-Founder [Cobind](#) 2003 - 2004

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

Software Engineer [MSA](#) 2000-2003

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

Member of Technical Staff [CA](#) 1995-2000

- Built C++ GUI for Legent (Automation Point) and Platinum (Raveler), before acquisition by CA
- Wrote C++ code for CA-Unicenter products after CA acquisition

Education

- Bachelor of Science Duquesne University 1991