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Objective

Help a small team deliver reliable, usable, and valuable software using iterative, reflective, and lightweight 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 RC Terrain Visualization
- 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