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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 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, postgresSQL 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