# **Darrell Piner**

Louisville, Colorado, USA +1 (303) 578-0035 darpin1963@gmail.com

Based in Greater Denver, Colorado Open to opportunities:

Authorized to work in the US for any employer.

- *onsite* in Boulder, Downtown Denver and the northern 'Suburbs',
- *hybrid* in Metro Denver area, and
- fully-remote opportunities

## **SUMMARY**

Extensive experience designing and implementing software systems in a wide array of languages and technologies. Most comfortable with C++ and system-level applications; lots of experience with SaaS and  $cloud\ services$  over the last few years.

Experience in modern technologies e.g., **OO**, *containerization*, *microservices*, *cloud*, **REST**.

Full understanding of the *development lifecycle*, *agile* processes / ceremonies, and a desire to *drive the processes* in efficient and useful ways making the *team and company grow* and *helping people* become *better* at what they do both professionally and personally.

Math geek who enjoys *measuring* things, *gathering* data, *identifying* trends, experimenting with, and "discovering" what the numbers might mean.

Extreme interest in identifying and gathering *metrics* measuring all aspects of software development including inception, planning, and mapping, as well as, typical development tasks, and using such to identify trends and gauge performance.

Eager to *lead* and *inspire* others (not just engineers) to *become better* at their craft, whether as their peer, leader, or underling.

Love of all things tech. With an eye for new tools and techniques to do really cool things.

## **OBJECTIVE**

Secure a position leading and driving development of *interesting*, *useful* software and services, where I can *write software*, *build teams*, and *develop engineers*, plan and build *architectures* and *software solutions*, and *mentor* and help others in the same and on their path.

Specifically, interested in 'leadership' roles driving planning, requirements, and processes where tools and techniques are identified and research performed for proper usage in potential solutions, and driving execution to successful deployment.

## **EXPERIENCE**

#### Ivanti, Salt Lake City, UT — Fully Remote Senior Software Engineer — Nov. 2021 – July 2024

Using modern C++ on Linux:

- supported / augmented / enhanced in-house SDK for cross-platform patch management
- supported and tested legacy (content-based) C++ Linux patch engine
- developed a framework for new generation (content-less) patch engine including
  - composite pattern to decouple steps from driving algorithm
  - algorithm calculating package state of machine before and after operation
  - abstraction so that algorithm was wholly decoupled from the operation itself
  - state management to handle interruptions in any step
  - reboot scheduling / management and resume capabilities
  - o full test-drive mode handling canned responses for selected steps

Using docker and compose specifications for ever-growing set of Linux distributions developed:

- (compile|build|package|publish)-as-a-command from a single host
- validation tests for each target distribution
- build artifacts published to an arbitrary mounted data store
- specifications for X11, debug, and other developer chosen tools
- sets of configuration-as-code specifications for local and orchestrator deploy

#### Other Accomplishments:

 championed and led weekly knowledge exchange meetings among teammates and with other invited teams' members

*Tools/Skills: C++, Linux, day-to-day machine Ubuntu LTS, docker, docker-compose, cmake / make, gdb, design patterns.* 

#### Mersive, Denver, CO — Senior Software Engineer — Feb. 2020 – July 2021

Using Python, connexion and openapi / swagger specifications:

- productized location service from data-scientist prototype
- SAML integration with identity providers
- developed pandemic 'workplace wellness' service for safe resource scheduling / utilization Using docker and compose specifications:
  - drove / influenced cloud techniques migrating a monolithic cloud distributed system to a microservice-oriented solution
  - developed and presented docker-based tools for front-end developers for testing

#### Other Accomplishments:

championed and led weekly knowledge exchange meetings among teammates

Tools/Skills: Python, flask / connexion, docker, docker-compose, git, gcp, k8s, drone

#### JumpCloud, Boulder, CO — Senior Software Engineer — July 2018 – Jan. 2020

Using nodejs and go supported / augmented / enhanced:

- · web microservices for cloud-based active directory service
- backend directory functionality
- directory microservice integration with external services (gsuite)

### Other Accomplishments:

- performed some lead and product owner roles for team
- worked with newly onboarded TPM role to fast-track understanding and provide much needed Product Management input to the team

Tools/Skills: nodejs, golang, linux, backend, docker, docker-compose, bash, grpc, mongo, postgres, github, agile, ldap, gsuite, o365, intellij / golang / datagrip, robo3t, apache directory studio, aws

### Alteryx, Broomfield, CO — Senior Software Engineer — Oct. 2017 – June 2018

Using C++ on Windows and Linux:

- supported / augmented / enhanced analytics engine application
- ported plugins from legacy engine format

#### Championed:

- move to formal code reviews
- transparent use of docker containers for QA testing on Windows
- Linux port analysis, troubleshooting, and container testing

### Other Accomplishments:

- recruited members and chartered an internal Toastmasters International club
  - acted as Club President recruiting and training other officers

Tools/Skills: visual studio, C++, code collaborator, docker, linux, agile

## MassRoots, Denver, CO — Senior Software Engineer — May 2017 – July 2017

Using golang:

- rewrite a specialized social network to be more scalable
- developed behavior-driven-development test suite for rewrite

### Other Accomplishments:

 Identified as Manager for Community team -- company ran out of money; engineering team dissolved.

Tools/Skills: linux, microservices, containers, intellij / goland, firebase, android

#### NexGen Storage/Pivot3, Louisville, CO — Senior Software Engineer — April 2014 – May 2017

Using C++ on high-performance Linux storage processor:

- led research on next generation QoS algorithm
- developed framework for using different QoS algorithms
- gathering and visualization of IoB metrics

*Tools/Skills: C++, linux, R, shiny, java, bash* 

#### Cisco, Denver, CO — Senior Software Engineer — April 2008 – April 2014

- C++ on Linux on Jabber / XMPP server features.
- Python on Linux for unit / functional tests of Jabber / XMPP server.
- Java on Android for Cisco Spark application (2nd member of initial team).

*Tools/Skills: C++, python, java, android* 

### Aztek Networks, Boulder, CO — Senior Software Engineer — July 2007 – April 2008

- Led initial software portion of new, from scratch, line-switch project.
- C++ on Linux on emergency telephone switch.
- Javascript / PHP for full-stack UI port / redesign for ported VOIP switch.

*Tools/Skills: C*++, *php*, *javascript* 

### Xpedite / Premiere Global, Boulder, CO — Senior Software Engineer — Oct. 1998 – July 2007

- Lead on scripting and session manager components from design to integration to deployment.
- C++ on SCO and Linux on scripting and session management components of telephony server.
- Created proprietary scripting language for specialized call flows.
- Wrote tooling and application framework for common component processes.

*Tools/Skills: C++, sco, linux, telephony* 

### Bendata, Colorado Springs, CO — Senior Software Engineer — Jan. 1997 – Oct. 1998

- C++ on Windows on GUI components of Help Desk software.
- Developed dockable window framework in proprietary windowing library.

*Tools/Skills: C++, glyphs* 

### Auto-trol, Denver, CO — Software Engineer — March 1995 – Jan. 1997

- C++ on HPUX and Solaris on 3D modeling visualization tool.
- Developed framework around X-window spec. for windowing and event dispatching.
- C++ on Windows on extending test suite.

*Tools/Skills: C++, hpux, solaris, emacs* 

### GA Sullivan, St. Louis, MO — Consultant — August 1994 - March 1995

- C++ on Windows on client cataloging application.
- Nantucket Clipper for insurance company claims software.
- C on Windows on corporate travel agency software.
- Extended Clipper application for multiple users on a network

*Tools/Skills: C++, clipper, consulting* 

## **EDUCATION**

#### Kansas State University, Manhattan, KS — Master of Science — 1992-1994

- Master of Science in Computer Science (3.7/4.0)
- Coursework 1992-1994
- Defense: 1998
- Project: Compiler for Object Metric Analysis
  - measuring the object-oriented-ness of C++ code.

## Fort Hays State University, Hays, KS — Bachelor of Science — 1988-1992

- Bachelor of Science in Mathematics (3.8/4.0)
  - Computer Science emphasis
  - Management Information Systems minor
- Senior Project / Presentation: Object-Oriented Programming

### **WORDS**

```
C++ - modern-C++ - gdb - OOD / OOP - templates - lambdas - threading - microservices - atomic-operations - Linux - Ubuntu - Redhat - docker - containerization - control groups - lxc - proxmox - virtualization - qemu / kvm / vmware - kubernetes - BASH - IPC - git - REST - Python - SaaS - backend - json - xml
```

computational-complexity – efficiency-management – requirements analysis – planning – measurement – metrics – trends – engaging-presentations – EQ – mindfulness – intrinsic / extrinsic-benefits