

# Darrell Piner

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Based in Greater Denver, Colorado

Authorized to work in the US for any employer.

Open to opportunities:

- **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**, **docker**, **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 11/21-7/24*

#### *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
  - 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 2/20-7/21*

#### *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 micro-service-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 7/18-1/20**

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 10/17-6/18**

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 5/17-7/17**

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 4/14-5/17**

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 4/08-4/14**

- **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 7/07-4/08**

- 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

## OTHER RELEVANT EXPERIENCE

- Lead on scripting and session management components for telephony service.
- 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.
- Developed dockable window framework in proprietary windowing library.
- Augmented and supported main interface to 3D modeling visualization tool.
- Developed abstraction framework around X-window specification for windowing and event dispatching.

## EDUCATION

**Kansas State University, Manhattan, KS — Master of Science**

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

**Fort Hays State University, Hays, KS — Bachelor of Science**

- 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