



## CAREER PROFILE

I have an ambitious personality with over 25 years of experience in the computer and information technology field, seeking a leadership position in a dynamic business environment where my unique skill set can be used to its potential.

I strive to make sure any given technology strategy is not in place for its own sake, but exists to serve the overall business requirements. I have a deep-seated passion for this industry and believe that nothing is impossible.

My ability to envision of the big picture while maintaining a detailed understanding of the graphic detail has helped me to repeatedly make decisions that extract 80% of the value with 20% of the cost.

I endeavor to fulfill the corporate mission, or help invent a new one.

I am very results driven, and have been recognized for taking on major and groundbreaking initiatives.

Adaptation to rapidly changing environmental factors, resolution of critical issues has helped me to

*I live and breathe technology, and do it pretty well.*



## EXPERIENCE

### Vice President Engineering KnowBe4, Clearwater FL

2018 - 2019

Reporting to the CTO, I grew the Development and Quality Assurance divisions from under 20 to over 60 people. I built a lean engineering organization from the ground up focused on high-quality, extremely scalable software platforms that were instrumental in propelling KnowBe4 to a 2019 billion dollar valuation in the top right corner of the Gartner Magic Quadrant.

*KnowBe4 - KnowBe4 is the Gartner Magic Quadrant leader in the Security Awareness Training space.*

- Responsible for the growth and leadership of a large engineering team, including a range of developers and quality assurance engineers. I accomplished this through evangelism, sponsorship, and outreach across technology communities.
- Worked hand in hand with the CTO to craft a scalable architecture and sustainable SaaS platform stacks leveraging the many of the AWS technologies that are the backbone of KnowBe4's core business.
- Led initiative to modernize and radically increase the accuracy and resolution of BI insights from the engineering organization, thus enabling the Finance and Growth teams to position KnowBe4 for IPO.
- Introduced and cultivated an inspired development methodology and CI/CD strategy, enabling my teams to deliver the highest quality software products and positions KnowBe4 as the class leader in our space.
- Assembled and led a team to envision, plan, build, and ship a SaaS software platform from the ground up to public launch in six months. This platform (PhishER) has already earned revenues approaching \$5m in less than a year and contributes heavily to overall MRR.
- Planned and led multiple project teams through major technical debt initiatives, all with radical improvements to measured performance and throughput metrics.
- Created and Established OKRs (Objectives and Key Results) for the Engineering Division, helping to further manage and drive hypergrowth.
- Developed and established a common set of methodologies across all development teams including Ruby, Golang, PHP, .NET, Java, and Python, unifying all the teams and standardizing QA processes across the organization
- Launched and directed the effort to build out a comprehensive QA automation effort using a mixture of Selenium and Ranorex.



## Jason Fraley

Technology Czar and  
Engineer of Things

✉ [jfraley@chmod-xchmod.com](mailto:jfraley@chmod-xchmod.com)



Most recent version of this resume available here:

[chmod-xchmod.com](http://chmod-xchmod.com)

[linkedin.com/in/jason-fraley](https://www.linkedin.com/in/jason-fraley)

[oelbrenner](https://github.com/oelbrenner)

## SKILLS AND PROFICIENCY



## Chief Technology Officer

1800PackRat / ZippyShell, Tampa FL, Wake Forest NC

2017 - 2018

As the CTO and member of the executive management team, I led the large-scale re-hosting and consolidation effort of all Information Technology systems. Architected and implemented the rapid development and migration of a new CMS, order management system and pricing engine. Oversaw the technology aspects of the merger with 1800PackRat.

*ZippyShell - 1800PackRat is the 2nd largest moving and storage company in the US servicing well over 300 million customers annually*

- Responsible for the architecture, integration and implementation of salesforce.com CRM system including integration with Rails app via Heroku Connect DB backend, and other AWS hosted systems.
- Designed, developed, and implementation of replacement CPS (pricing engine) and pricing algorithms freight support systems and front-end sales systems, all built on Rails/Heroku stack
- Built out state-of-the-art call center with maximum redundancy built into every layer, and scalability for the future via Google Chrome desktop and Windows hybrid architecture.
- Responsible for and creation of multi-million dollar annual OPEX and CAPEX IT budgets.
- Implemented comprehensive CM systems and process, from test-first development practices to automated CI and deployment, leveraging Capybara, Travis, Heroku Pipeline, and on-demand Docker and AWS instances complete with SCM, Slack integration and automated reporting and history tracking.
- Led agile and effective development, devops, and helpdesk teams to support growth and reliability.
- Architected and led the development effort to migrate and consolidate onto a modern payment platform and credit card processor and built out payment workflows in Rails application integrated into Quickbooks
- Overhauled and rebuilt accounting systems and corporate wide File/Print systems including migration into A fully redundant AWS stack leveraging load balancers, docker/kubernetes, clustering and fully automated provisioning following the IAAS model.
- Led migration effort to modern VOIP telephony system including redundant telco links and automated IVR testing suite deploying custom Ruby/Twilio API integration.

## Owner, Founder and CEO

Ahoy Consulting, St. Pete FL

2013 - 2017

Launched a new consulting company in 2013 and built a large local and national client base and provided excellent service and delivered premium software products and systems to our clients.

*Ahoy Consulting is a software development and information technology and engineering systems consultancy with a heavy focus on Ruby on Rails and Native mobile applications*

- Full product lifecycle production/development of dozens of application and backend systems for local and national clients built on platforms using PHP, Golang, Ruby on Rails, C/Obj-C among others.
- Produced, developed and launched multiple iOS and Android mobile apps into marketplaces, ranging from simple recipe apps written in web frameworks like Cordova, Ionic and PhoneGap data collection kiosk style apps to games and social media apps across a wide range of Native Obj-C/Swift and Java and hybrid application frameworks.
- Built and integrated with a wide range of custom e-commerce configurations spanning from simple crowdsourcing collection systems and t-shirt sales to sophisticated membership, product sales systems and complex accounting systems tied into popular commercial accounting packages using XML/SOAP and REST APIs done mostly with Ruby.
- Systems development and integration expertise in claim processing and medical billing, electronic document generation and lifecycle oversight, inventory management, and varying types logistics and fulfillment scenarios working with HIPPA, HETS, CMS and a wide range of other EDIs in the medical data-interchange space. Developed a Ruby library for communicating with ANSI X12 interface.
- Workflow and process optimization, through the development of scratch-built ruby modules as well as integration into many popular CRM and workflow systems like [salesforce.com](https://www.salesforce.com) and Microsoft dynamics.
- Project management, auditing, code review, and technology and systems assessments for a diverse set of clients covering scenarios like pre-IPO and pre-acquisition due diligence and PCI/HIPPA compliance
- Engineering life-cycle testing, performance tuning, and production streamlining of Ruby applications.
- Product development, marketing and deployment strategies, market penetration, and user adoption.
- Infrastructure architecture/design, implementation, monitoring, and management of a large base of installed AWS technologies including: EC2, ELB, EBS, S3, Cloud Front, Route 53, RDS and Lambda.
- Information security architecture/design and deployment, monitoring, and management.

Agile/Lean

UI/UX concepts and implementation

Immutable infrastructure

Chef/Puppet

Nagios

Capistrano

Docker/Moby

Linux

AIX

Solaris

HP-UX/other

AWS platform

Git/CVS

Heroku

Salesforce

IBM Storage

NetApp

NFS/Rsync/OpenSystems

EMC

Hitachi Storage

Cisco

Checkpoint

Led the entire development staff company-wide of Ruby and PHP developers to build out many successful ruby applications and mobile apps.

*Spatial Networks is a geospatial engineering and consulting firm*

- Migrated all production and staging systems to Chef systems integration framework and built out a complete ruby-based DSL for managing systems hosted across multiple AWS availability zones.
- Built suite of performance benchmark and stress-testing tools leveraging Selinum, Rails/Rspec and a complete reporting and monitoring application built on Rails.
- Development of geospatial data warehouse using a hybrid MongoDB/Postgres/PostGIS data layer under a Rails application spanning hundreds of terabytes of geo-catalogued data.
- Development of Rails/Golang based subscription and data inventory management system, tracking and versioning digital assets, and delivery logistics workflow with AWS S3, Glacier, and CloudFront.
- Ruby/Rails development on several other customer-facing SaaS applications.
- Architecture, development and deployment of next-gen distributed application framework and database servers in multi-region fully-redundant AWS cloud environment leveraging capistrano, chef, along with development of internal tools using the AWS API.
- Migration to completely re-written e-commerce backend, integrating multiple software offerings into a unified revenue collection and accounting system, with a focus on PCI compliance and security.
- Overhauled/replaced internal network and security systems including firewall, VPN, and site-to-site replication along with a VPC network to various secure AWS availability zones.

**Director of Technology**  
GCA, Tampa FL

2004 - 2011

Responsible for company-wide team of pre/post sales systems engineers, resource allocation, training and vendor certification. Increased revenue and nearly tripled the business division. Responsible for selecting best-of-breed technologies in the IT space, establishing and building partnerships with these hardware / software manufacturers, and developing a value-proposition and go to market strategy.

*GCA is a national VAR (value-added reseller) with 7 locations in the US.*

- Report directly to CEO as trusted member of executive team influencing focus on core business competencies and future direction.
- Created customer product and service delivery model including installation and implementation methodologies, ensuring customer satisfaction and repeat business.
- Manage technical support team responsible for large demanding customer base as well as company-wide national IT support and infrastructure systems.
- Successfully developed and deployed configuration management procedures using Github, disaster recovery via AWS ECS image sync, information security and numerous other improvements for internal IT systems spanning a wide range of other technologies.
- Spearheaded large migration to AWS cloud based services and virtual desktop, reducing budget impact and shifting costs from CAPEX to OPEX.
- Developed numerous ground breaking marketing strategies using social media and other web 2.0 technologies directly targeting technical customer base.
- Developed plan to move ailing training division back into profitability leveraging multiple open-source technologies and engaging the local technical community.
- Created major process improvement initiative to drastically increase re-useability of code and documentation efforts using CRM and automated testing tools Selenium and Capybara.
- Re-design and implementation of billing, hard and soft asset deployment tracking and accounting.
- Design and implementation of SugarCRM implementation an integration into existing CRM systems and internal tools using PHP and early version of Ruby on Rails.
- Developed new business plan, revenue models and extensive market research for outsourced IaaS/PaaS division based on emerging efficiencies of VMware and Amazon AWS technologies.

**Senior Systems Engineer**  
Oracle (Sun Microsystems), Tampa FL

2002 - 2004

Member of local post-sales support team on all Sun products for customers in the west central Florida region. Local service advocate for key Sun customers. Senior level Sun hardware and software engineer.

*Sun Microsystems, Inc. ( now Oracle ) is a company selling computers, and information technology software and services.*

- Responsible for local service level agreement delivery for Sun customers.
- Managed customer support expectations ensuring systems availability while reducing time-to-resolution efforts.
- Created a positive view of service efforts creating a fertile environment for the sales team to increase Sun footprint.
- Provided real-time feedback to the sales team of "conditions on the front" to arm them with information to ensure successful sales strategies.
- Responsible for facilitating customer relationships with support and providing advice and assistance to internal Sun employees on diverse customer situations and escalated issues.
- Developed automated process for generating customer report information, leveraging modified internal tools written in C and Perl.
- Numerous root-cause analysis and advanced troubleshooting success stories.
- Regional leader in advanced storage systems deployment and training.

Extreme Networks

Juniper

PFsense

Barracuda

sourcefire/snort

Riverbed

## CERTIFICATIONS

**AWS Certified Solutions Architect**  
(Amazon Web Services)

**AWS Certified DevOps Engineer**  
(Amazon Web Services)

**AWS Certified Developer**  
(Amazon Web Services)

**VCP, VCAP, VCDX**  
(VMware)

**CSE, CSA**  
(IBM AIX/POWER and storage)

**RCSE**  
(RedHat Linux)

**CLP 9,10,11**  
(SuSe / Novell Linux)

**NCDA, NCIE**  
(NetApp)

**OCP, OCE, OCS**  
(Sun / Oracle)

**SCS**  
(Symantec NetBackup)

**Sourcefire / Barracuda / Riverbed**  
and other various vendors

**ITIL foundation**

**ACP**  
(AutoDesk)

**Vice President**  
Vistela, Tampa FL

2000 - 2002

Co-founder of a high-tech startup, and helped to develop groundbreaking interactive television technology. Helped craft a unified vision of application and user-interface, marketing strategies and strategic company wide vision. Directed development, integration, architecture, and deployment.

*Vistela is a software and services company focused on building interactive digital television services*

- Member of executive staff, formulated emerging strategy and market integration.
- Responsible for company wide IT infrastructure and cable system integration and leading the DevOps team.
- Architected hardware and software development environment for set-top and back-end developer staff including source code repository systems and release and deployment strategies.
- Involved in contract negotiation and technology partner relations.
- Helped to build early B2B e-commerce system with direct integration into accounting system leveraging Java and early enterprise application frameworks.

**Senior Systems Engineer**  
GTE ( now Verizon ), Tampa FL

1996 - 2000

Rapidly rose through the ranks at GTEDS with increasing responsibility, from programmer and systems administrator to team lead and department manager. Worked on many extremely high-visibility projects and was actively involved with planning and contributed to various projects ultimate success.

*GTE Corporation (Now Verizon) was the largest of the "independent" US telephone companies during the days of the Bell System*

- Department manager responsible for development environment and all test-dev environments under the AWAS and AAIS project teams including one of the largest at the time installation of Sun E10K enterprise server platforms.
- Key player responsible for the hardware and software architecture during the development phase of AAIS which is now a core critical business system for Verizon.
- Senior technical team lead for the field trial of high-visibility commercial product. Spent 5 months in Germany leading the integration and operation of POC systems with German telephone customers legacy systems.
- Instrumental work done around UNIX system performance tuning and data migration from legacy mainframe application to UNIX based open system.
- Worked directly with Sun Microsystems engineers to tune Solaris kernel specifically around RAM based filesystems and maximizing performance and IO throughput.
- Senior lead engineer responsible for the pre-production roll-out of the AAIS system nationwide resulting in a massive CAPEX to OPEX shift and overall cost reduction.
- Software development on numerous projects using C, C++, Java including contributions to many open-source GNU tools.
- Oracle, Informix, and DB2 database administrator duties including production and development migrations index architecture and triggers and backup and recovery.
- Sun Solaris, HP-UX, Linux, and IBM AIX system administration on nearly 200 unix systems, unified patch and deployment methodology and established configuration management procedures and documentation.
- Installation and maintenance of early EMC disk based storage for Open Systems ( AIX/Solaris ) worked directly with engineering teams to troubleshoot and performance optimize filesystem access on typically mainframe based LUN architecture.

**Senior Systems Engineer**  
PC COM, Tampa FL

1994 - 1996

Hired to start new business ventures into white box PC sales and reseller program development. Built solid customer base around IT consulting and network/systems infrastructure. Successfully deployed numerous IT systems to local small businesses.

- Launched a white-box OEM PC division from zero to a cash-flow positive division in under six months.
- Established new vendor partnerships and grew the systems reseller division to +4x revenue numbers.
- Launched company's first website and e-commerce system, with hooks into supply-chain and order fulfillment done mostly with C and Perl.
- Led engineering consulting division installing and supporting numerous local SMB business networks across a wide base including Novell/Netware, Microsoft Windows, IBM Mainframes S/390 and R/390 SCO UNIX and Sun Microsystems.
- Supported Mainframe developers leveraging R/390 technologies in early Y2K testing and software development efforts.

**Systems Engineering, software development**  
Various, Tampa FL

1990 - 1994

- Worked as a consultant for various local companies developing software and providing systems and software consulting services on a wide variety of systems including Tandem and PDP-11, Windows, UNIX and early adopter of Linux.
- Ran a small ISP out of my garage providing dial-up internet access to the neighborhood thru a ISDN.

## PERSONAL SKILLS

•Hard worker with strong analytical, conceptual, research and problem-solving skills

•Very good communication, organizational, and interpersonal skills, fast learning

•Experienced with multi-disciplinary team environments

•Excellent formal presentation skills

•Ability and willingness for fast learning,

Strong motivator, Ability to work under pressure

•Entrepreneurial spirit, and proponent of lean and agile methodologies



## PROJECTS

Projects built in the last five years, grouped by general category and use case

### Mobile apps

iOS and Android applications

- social media app - clone of instagram, geotagging, media upload, FB login and integration, contact list invite/import. Ruby on Rails, Postgres, Heroku, AWS, iOS app launched in iTunes Store.
- recipe app - fetch new content from server, custom CMS backend, done with PhoneGap and custom ruby API backend.
- industrial automation control app - connect to industrial equipment report status, change settings, schedule firmware updates, proxy delivery for remote sites. Leveraged eRuby (embedded ruby) on a micro controller to talk to a backend Rails application thru RubyMotion shared codebase running on a iOS device in a detached state.
- customer lead generation kiosk app - kiosk mode Android device collects customer data, ships to backend and into CRM system. Built with web framework Ionic connected to rails web application hosted on geo-diverse AWS hosts with CloudFront caching layer.
- on-site healthcare reporting app - home care nurse application to collect patient data and administer home care, integrated to custom backend and ties into insurance billing and claim processing system. Native iOS application with time and task reporting interfaced to a rails web application.
- field data collection app - remote worker assignment data collection app built in Cordova on android for on-site service support and inventory, works with custom built API, and rolls data up to [salesforce.com](https://salesforce.com) via Ruby connector and a Laravel PHP application.
- precision video download and playback app - instagram, facebook, youtube integration, custom made video codec processor, custom built Ruby/Rails backend API stack and dropbox integration. Built with native Swift and ObjC hybrid runtimes.
- immersive educational trivia game app - with large screen control head built on custom android tablets with a native Java codebase and a Ruby based Sinatra content management system.
- produce harvest tracking app - iOS mobile app client scans worker badge and tracks hand picked produce counts tied to a Rails application serving as customer portal and admin interface.
- remote deposit check app - for chain of credit unions and affiliates, purpose built photo check scan app with image processing and remote deposit and account management features, API integration with banking systems

### Workflow

workflow and paperless mapping and optimization all built with Ruby on Rails

- medical claim processing - complete workflow mapping and paperless automation system, API integration with quickbooks, FAX and VOIP providers, legacy API integration with medical coding system, PDF generation with Prawn ruby library, geospatial integration via PostGIS
- medical service delivery - complete workflow mapping and paperless automation system, API integration into HETS(hippa) eligibility system, PDF generation, geospatial, compliance reporting
- hospital access tracking system - built for vendors and contractors, badge generation and access tracking, included mobile app development and kiosk mode

### e-commerce

systems built to handle end-user payments and subscriptions

- prescription drug e-commerce system - multi pharmacy and inventory control, credit card processing, membership / monthly billing, accounting API integration and reporting, geospatial, compliance, PDF generation. Built with Rails and hosted on AWS with Docker containers, more recently upgraded to leverage Kubernetes and auto scaling.
- grocery store retailer digital presence application - retail store chain website management, coupon and circular generation, tracking and delivery of digital resources. Overhaul of old Rails application with modern version of all internal systems, PCI compliant architecture stack hosted on AWS/S3
- fund-raising/crowd-sourcing application - clone of gofundme targeted at school age children to raise funds for school trips and activities, integration with credit card processor and ECH bank transactions. Created with Rails and leveraged early version of Stripe Connect.
- multiple applications - credit card processing, memberships, metered billing based on usage. Work with Ruby State-machine and other stateful libraries in a Rails application.

### Fulfillment, Inventory and asset management

applications built to facilitate delivery and management of products and services

- multiple applications - tie in to UPS/FedEx shipping label printing APIs built early version of Ruby library to simplify and create an abstraction layer API.
- medical service delivery - asset tracking, appointment tracking, dispatch and queue assignment built on ruby state-machine and custom Rails application
- industrial automation - dispatch and install technician assignment, job prep checklist enforcement
- medical supply cabinet automation application - RFID driven remote inventory management, built custom prototype RFID tag reader hardware tied into backend API which tracks and auto re-orders and delivers replacement products
- produce farm harvest tracking backend - backend for mobile app: matches mobile scanned "picks" in the field with a worker, tracks harvest and ties into billing accounting systems via export file access
- multiple applications - inventory management both digital and physical, supply chain ties-ins, shipping and fulfillment tie-ins, API integration to quickbooks and other COTS accounting packages

## CRM

customer resource management applications and integrations

- multiple applications - salesforce.com, sugarCRM, heroku connect and various other COTS CRMs
- Built complex data translation layer in Ruby to map [salesforce.com](https://www.salesforce.com) database columns to ActiveRecord style naming conventions. Also mimicked the HABT relationship models in SF to map to AR all done with the Heroku Connect stack as the interchange bus.
- Built a Ruby on Rails application exposed to Visualforce page thru Salesforce Canvas app creating a seamless hybrid experience between two completely separate application instances.
- Ruby interface and interpolation engine for Salesforce to generate and send transactional e-mails thru the Rails app and deliver to Mailchimp, SendGrid, and PostmarkApp delivery providers.

## Billing

application integration into popular bookkeeping billing and accounting systems

- multiple applications - API integration into Quickbooks/Xero/ many other smaller systems, CMS medical code billing (X.12/HL7 EDI interfaces), QR coded paper FAX billing with return "auto association" via scan, Ruby and Phaxio and Twilio

## Social Media

applications and integrations created for the social media space

- multiple applications - Facebook integration ranging from simple login to full graph implementation, Twitter API integration OAuth and timeline, Instagram API integration, all integration done via ruby libraries

## Industrial Automation

Connecting software and systems to industrial systems

- industrial pump control system - complete design and architecture of system to install, configure and manage industrial fluid pumps, remote mobile app for management and firmware delivery, custom designed micro controller firmware for serial communications to device and common message formatting across 4 platforms using eRuby, RubyMotion, and Ruby on Rails

## IoT and other

internet of things and other special projects

- custom designed hardware circuit for motorcycle - reverse safety interlock circuit for consumer aftermarket installation
- racetrack timing and scoring system - RFID tag reader interface into custom developed backend Rails application which tracks scoring, timing, and configurable bracket and race organization
- alexa voice assistant skill backend - alexa skill development and backend, customer facing setup wizard, text/SMS message delivery built on Rails backend and leveraging AWS Lambda



## TECHNICAL SKILLS

### Infrastructure and Cloud Systems

Servers and infrastructure in both cloud and on-prem configurations

- Deep hands on experience with nearly every product from AWS including VPC, EC2, Auto Scaling, ELB, ALB, EBS, S3, SQS, SNS, Cloud Front, Route 53, RDS, Lambda, APIGateway, Redshift, ECS, CloudWatch, CloudFormation. I have been implementing and building systems on AWS since 2008.
- Extensive experience over 15 years architecting, designing and configuring Servers Storage and Systems from nearly every vendor past and present from Tandem and IBM RISC/POWER thru Sun Microsystems SPARC and everything X86/64 in between.
- Expert level in many provisioning and management systems including Chef, Puppet, Capistrano Cloud Formation, Terraform, Docker, Kubernetes, and many others including custom solutions hand-built for special use cases.
- Comprehensive and wide-ranging experience with networking, firewalls, VPN/VLANs, load balancing, routing, packet inspection, IDS and IPS systems and all things related to the IP4/IPV6 stack.

### Software Development

Software development, methodology, and automated test/build and deployment tools

- Ruby/Ruby on Rails, React, Angular, Backbone, Python, C/C++/Obj-C, Lua, Perl and unix shell. Current in many languages with very recent hands-on development experience.
- Extensive experience on functional front-end systems leveraging CSS/SaaS and many popular design frameworks. Excellent working knowledge of many modern asset management tools including asset pipeline, webpacker, sprockets and others
- Deep understanding of application development concepts and architecture, big believer in "API first" and TDD methodologies. Nearly 20 years of web and web application development from early days of compiled c programs dropped in a cgi-bin folder to complex multi service RESTful API endpoints and micro service architectures.
- Broad and comprehensive current experience with popular build and deployment strategies and tooling including Jenkins, CircleCI, Github integrations, Heroku Pipeline, AWS CodeDeploy, Travis and others.
- Wide expertise of the mobile application development landscape, including Native, Hybrid and other web frameworks. Built and shipped many apps into both Apple/Itunes and Android app marketplaces. Current and recent experience with React Native, Swift and ObjC.