

Jack Brown

Phone: (509) 260-0671
Email: jack@brownjohnf.com

Web: www.brownjohnf.com
GitHub: @brownjohnf
GitLab: @jack

Strengths

- Self-directed and motivated software engineer, infrastructure engineer and systems administrator
- Proven history of working successfully in a remote-only environment
- Experience designing, building and operating complex, large-scale distributed systems and tools
- Works well in teams and groups as a leader, facilitator or participant
- Articulate individual capable of clear oral and written self-expression and professional communication
- Comfortable working across cultures, languages and time zones with experience living and working abroad (Middle East, West Africa), including three years with the US Peace Corps

Projects

Organizasum, Rust, <https://gitlab.com/jack/organizasum>
Dedup photos by pixel-stream checksum; organize according to EXIF metadata.

Verto, Rust, <https://gitlab.com/jack/verto>
Automatic semantic versioning for git projects using keywords in git commit subjects.

Slit, Go, <https://github.com/brownjohnf/slit>
Bits of cut and awk mashed up with a cut-like interface.

Experience

Software Engineer, Textio, Seattle, WA Jan 2019—Mar 2020
<https://textio.com>

Provided stable, efficient internal tooling for business-critical application deployment, security and reliability as part of the infrastructure team for a SaaS business selling an augmented writing platform to enhance recruiting and business communications.

- In conjunction with stakeholders such as developers and IT security, developed and disseminated best-practices to ensure security and reliability of deployed code
- Designed and implemented robust, scalable fault-tolerant systems such as customer-facing SFTP services and immutable, tamper-resistant source control backups
- Used tools like Docker to develop standardized build systems for cross-platform, low-dependency, consistent artifact generation
- Solved problems creatively to ensure minimal friction for end-users while ensuring stakeholders' specifications were met and deliverables arrived on schedule
- Started and led weekly team planning meetings, which improved coordination and visibility of team activity

Senior Software Engineer, Balena, Remote May 2016—Dec 2018
<https://www.balena.io>

Operated infrastructure and ran DevOps team for SaaS business offering an OS, build pipeline and fleet management for IoT devices running Docker on embedded Linux.

- Worked to improve efficiency and speed from spec to deployment for a complex containerized application deployed to orchestrated hosts
- Managed server infrastructure spanning VPS and bare-metal providers, across multiple datacenters; maintained internal deployment tools to ensure safe, zero-downtime deploys
- Designed and implemented CI tooling to automate the continuous delivery of build artifacts, including support for builds on GNU/Linux, MacOS and Windows

- Designed and implemented ZFS-based large-capacity real-time remote caching for builds, allowing a ZFS pool to be mounted via NFS on build servers and leveraging ZFS snapshots to provide high performance while minimizing cache-poisoning risk
- Oversaw the initial phases of migrating from a legacy container orchestration platform to Kubernetes

Software Development Engineer II, TUNE, Seattle, WA Jul 2014—May 2016
<https://www.tune.com>

Brought knowledge and experience from MobileDevHQ to a growing, post-acquisition team working to integrate systems, migrate towards a service-oriented architecture, and improve performance for data collection, analysis and storage as part of the TUNE App Store Analytics division.

- First-adopter for the TUNE-wide migration to Docker; worked closely with operations to develop best practices and tooling for a smooth rollout.
- Developed on-line analytics and intelligence product features by ingesting downstream information from primary data acquisition in realtime, backed by Elastic-search
- Performed statistical analysis on datasets to evaluate prospective approaches for presenting data to consumers in a meaningful and actionable format

Software Engineer, MobileDevHQ, Seattle, WA Jan 2013—Jun 2014
<https://www.mobiledevhq.com> (now TUNE)

Innovated rapidly to competitively position MobileDevHQ in the emerging App Store Optimization (ASO) market, leading to an acquisition by TUNE.

- Self-directed work developing and maintaining distributed systems for the asynchronous processing of hundreds of millions of datapoints daily, ingested from around the world across complex and low-reliability networks and hosting infrastructures
- Worked to continually improve performance and cost optimization for a Rails monolith serving all customer traffic

Founder/Lead Developer, Fadidi Digital Media, Seattle, WA Nov 2012—Dec 2014

Lead Developer, PeaceCorps|Senegal, Dakar, Senegal Feb 2011—Nov 2012
<https://www.peacecorps.gov/senegal/>

Agroforestry Extension Agent, Peace Corps, Senegal Aug 2009—Jan 2011
<https://www.peacecorps.gov/senegal/>

Philosophy Teacher, Brummana HS, Brummana, Lebanon Sep 2008—Feb 2009
<http://bhs.edu.lb>

Technical Skills

Languages: Rust, Go, ES6/Node, Ruby, Bash/sh, SQL, Python, Embedded C (AVR), G-Code (CNC Machining)

Tools: Docker, PostgreSQL/MySQL/MariaDB, Redis, Elasticsearch, Jenkins, ConcourseCI, Vagrant, Ansible, Rancher, Terraform, Packer, CloudFormation, Vault, Kubernetes

Services: AWS, Packet.net, DigitalOcean, Hetzner, Resin.io, CircleCI, Git-Lab, GitHub, Linode, Heroku

Academic

B.A. Liberal Arts, St. John's College, Annapolis, MD May 2008
<https://sjc.edu/annapolis>