



Uncapped Games

Senior Full-Stack Server Engineer II, **Battle Aces (Server)**, November 2021 – Current

- SME for Kubernetes integrations, databases, and technical sound design. Mentored junior engineers.
- Planned & migrated monolithic game service into a distributed microservice architecture (Kubernetes), developed standards & wrote service code (Golang, gRPC), pitched & shipped MongoDB & Redis systems, and supported local development (Minikube) of everything.
- Built & supported features including leaderboards (Atlas Triggers), environment discovery (Kubernetes), game server scheduling (Agones), API versioning across all services, in-game minimap (C#), and more.
- Sole technical sound design resource for the Audio team. Built in-house Unity (C#) middleware for audio playback in all parts of the game, managed in-game alerting system, led & edited VO sessions, created content (environment SFX), mixed entire audio bus, and more.



Riot Games

Senior Systems Engineer, **Wild Rift (Joint Ops)**, November 2020 – November 2021

- SME for Platform 'pod' focusing on reducing manual deployment operations. Mentored junior engineers.
- Lead on visibility and monitoring improvements initiative. Stood up iterative processes to address alerting issues, deliver dashboards, and improve runbooks for faster triage.
- Built and maintained several Slack bots (Golang) to better ingest work between teams and automate actions.



Blizzard Entertainment

Software Engineer, **Warcraft Rumble (Server)**, February 2020 – November 2020

- Built tools for future Live Ops support of distributed software systems.
- Projects include game-specific message tracing for Kafka, hotfix deployment support for Spinnaker, and better build failure analysis from CI/CD pipelines. Maintainer of webtool (ReactJS, ASP.Net) used for visibility and control over deployed services.

Software Engineer, **Hearthstone (Server)**, March 2017 – February 2020

- SME for purchasing & account data. Mentored junior engineers.
- Led 'Reliability Strike Team,' resulting in process changes to the patch development cycle that reduced the reliance on Live Ops by focusing on preemptive reliability engineering and improving early feature risk assessments.
- First point-of-contact for LiveOps incidents. Extensive daily debugging in both server (C++) and client (C#) codebases. Collaborated with SREs to build tools for monitoring, impact assessment, and more robust recovery of Hearthstone services. Experience fixing live online databases with Oracle PL/SQL.

Associate Systems Administrator, **US GNOC**, June 2016 – March 2017

- Daily tasks include incident resolution, completion of systems requests, and investigation into system-related problems across all of Blizzard's server environments (Moogsoft). Developed and maintained tools that simplify time-consuming GNOC administrator tasks (Bootstrap, PHP).



Confirmix, LLC

Software Engineer, **SecureSelfies**, October 2014 – November 2015

- Wrote & supported server systems to manage user accounts (LAMP-stack), aided in porting patented MATLAB biometrics algorithms for mobile use (C, Android NDK, iOS), prototypes & contributions to company patents.



West Virginia University

IT Administrator, **Lewis Research Group**, November 2012 – January 2015

- Sole administrator for physics research lab. 24/7 on-call for all lab server infrastructure issues, performed account management on backup NFS (Ubuntu, LDAP), and costed + implemented hardware upgrades.

Projects

Personal Website - <https://walterferrell.com>

Personal GitHub - <https://github.com/mtnbonez>

Ludum Dare 57 - <https://github.com/mtnbonez/ld-fiddyseven> - Team Lead (7 members)

MSPaint Jam - <https://github.com/mtnbonez/catnip-catastrophe> - Team Lead (7 members)

WVUAMP - <https://github.com/mtnbonez/wvuamp> - Team Lead (11 members)

Speaking

Industry Conferences

"Timezone Tango in Slaying the Impostor", **PAX Online 2020**, *Moderator + Panelist*

- Facilitated discussion between game industry professionals from around the world on their experiences of impostor syndrome and tips to shake that feeling.

"I Got Cover Letters Comin' Out the A**": Get That Games Job", **PAX West 2019**, *Panelist*

- Spoke to attendees about getting into the game industry as an engineer and how to deal with the obstacles along the way.

"Backstage at Blizzard", **BlizzCon 2018**, *Panelist*

- Spoke on behalf of Hearthstone's LiveOps team detailing our methodology of identifying, triaging, and mitigating live issues.
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Publications

Patents

Apparatuses, systems, and methods for confirming identity, **U.S. Patent No. 9,922,238**

- A system, apparatus, and method for confirming the identity and 'liveness' of a person for access validation.
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Education

Undergraduate, **West Virginia University**, *Morgantown, WV* • BS in Computer Science • Religious Studies minor

General Studies, **West Virginia State University**, *Dunbar, WV* • University Collaborative Program

Certifications

Forklift Certification, **National Forklift Foundation**, *Credential ID NFF-1707197962-2368-71323* • Expires 2027

Proficiencies

Unity - 7 years

C# - 6 years

C++ - 6 years

Kubernetes - 5 years

Golang - 4 years

OracleSQL - 4 years

MongoDB - 3 years

Skills

- Python, C, Java, JavaScript, LAMP-stack
 - AWS, GCP, Tencent Cloud, Mongo Atlas
 - Terraform, Helm, Kustomize
 - SNMP, Bash, ZSH, LDAP, NFS
 - Agones, Kafka, Cassandra
 - React.js, PHP, ASP.Net, Bootstrap
 - DAWs (Ableton) and audio-related DSP
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