Richard Carter

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Senior engineer on team that owns many League of Legends backend services. 8+ years full stack experience, developing & maintaining Java distributed microservices in AWS and private cloud, and UI in the LoL client (JavaScript, C++). Prior experience in the data storage industry and VMware integration. App development experience with Android and Flutter.

Experience

Riot Games – Senior Software Engineer, Game Flow Services, League of Legends   *Aug 2017 – Present*
- Created custom queue/multicast service to efficiently distribute end-of-game statistics data to microservices. Scalable and resilient; handles end-game data for all LoL game sessions worldwide.
- Optimized Hazelcast distributed cache usage in several of our services, greatly reducing network and CPU usage and fixing bugs/corruption. This enabled migration from Oracle Coherence to Hazelcast.
- Deep triage skills. Experience reading logs, understanding stack traces and error codes; analyzing heap dumps and profiler output for memory and CPU bottlenecks; interpreting metrics; using Linux utilities to diagnose issues; disciplined problem solving.
- Implemented WebGL animation in client party screen, working with artist to design flexible OpenGL shader with swappable texture components, and safe static fallback for low-spec PCs.

Nimble Storage (Hewlett-Packard Enterprise) – Staff Software Engineer   *Sep 2014 – Aug 2017*
- Did the initial development on the setup process for Nimble's hyperconverged solution.
- Full-stack developer for the VMware client plugins for Nimble Storage. Frontends are HTML5 and Adobe Flex (ActionScript), backend is Java with REST (JAX-RS).
- Developed a significant part of the VMware VVols integration. The VVols storage provider is a Java service running on-array, which implements a SOAP WSDL provided by VMware to seamlessly serve VMware storage in a way that takes advantage of Nimble's architecture.
- Helped maintain the custom reporting software that runs on-array to monitor VMware host systems and provide the data for Nimble Storage VMVision per-VM monitoring.

NetApp – Software Engineer, Manageability Engineering Group   *May 2012 – Sep 2014*
- Developer for System Setup, a configuration wizard that enables customers to initialize new storage systems from a GUI (C#). Ships with every new storage system; deprecated the command-line setup.
- Developer for OnCommand Unified Manager and Performance Manager, virtual appliances used to manage & monitor NetApp storage via a browser (Java, Google Web Toolkit).

Intern, Management Framework Integration Team   *May 2011 – May 2012*
- Developed a plugin to VMware's vSphere Client which optimizes and migrates running VMs (Java, GWT).

IBM – Intern, developerWorks IT Professional Skills team   *Jun 2010 – Aug 2010*
Advanced Energy – IT Generalist   *Sep 2009 – May 2011*

Education

North Carolina State University, Raleigh, NC
Bachelor of Science in Computer Science   *May 2012*
Concentration in Game Development
Cumulative GPA: 3.74 / 4.0   Major GPA: 4.0 / 4.0

Spare Cycles
- Sole developer of Android app "Archer's Mark" using Flutter. Paid app, >200 installs, 4.9 rating.
- Created Node.js IRC bot; communicates via raw IRC protocol, features script hotswap functionality.
- Recently (late 2020) started learning Rust.