

Shyamsunder Rathi (shyam)

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Experienced technical leader and people manager with a history of building teams, products and features.

EXPERIENCE

Nutanix, San Jose, California, US

Product: [Nutanix Files](#) - dynamic, scalable, software based file-server hosted on Nutanix hyperconvergence platform

Sr. Manager of Engineering

Jan 2020 - Present

- Managing a team of **11** full time engineers, leading **two** teams - infrastructure and gateway/API for the *File-server* product, across US and Europe.
- Planned and executed major features spanning across multiple geographically distributed teams:
 - Added File-server management and control plane to Nutanix Prism Central (PC).
 - Added RBAC capabilities in all public facing APIs, allowing different roles with restricted permissions.
 - Upgraded all APIs to make them ready for public consumption towards General Availability (GA) release.
- Led 3 major releases from inception to General Availability as development lead. Responsible for all development activities for the releases - including planning, feature selection, regular follow-up, defect management, QA support, etc.
- Led the development effort to get *Nutanix Files* listed as an approved product for DoD Information Network ([DODIN-APL](#)) certification, reducing the sales cycle for US Federal customer sales team from 18 months to 12-14 months.
- Led the constant effort to meet SLA for fixing customer found defects and ensuring a timely delivery of fixes to customers, and reduced the average number of open customer issues from approx. 10+ to 5.
- Handled all aspects of hiring - sourcing, interviews, compensation and title negotiations, onboarding, etc. Hired 4 full time engineers and 4 interns over the last two years.
- Familiar with all aspects of performance management, 360 feedback, promotion, yearly check-in, compensation evaluation, PIP management, off-boarding, H1B job profile write-up, CPT/OPT evaluation, PERM & GC related write-ups, etc.
- Managed all aspects of contractor hiring - interviews, vendor engagement, task assignment, performance monitoring, etc.

Staff Engineer

Dec 2014 - Dec 2019

- Hired as the first development engineer of the “File-server” team - involved since the inception to first GA release to multiple other features over the years, gaining familiarity and expertise with all aspects of a product life-cycle.
- Designed and implemented a callback based in-memory caching layer over a distributed metadata database resulting in more than 100% improvement in client-facing latency during the VDI login process (*part of product since 2017*).
- Designed and developed File-Blocking feature: a mechanism to prevent ransomware attacks by preventing creation and renaming of known ransomware file-name patterns (*part of product since 2019*).
- Led the efforts to debug, root cause and fix many major customer cases, such as, identifying and fixing a large latency problem while joining File-server to an Active Directory domain with hundreds of domain controllers.
- Demoed and explained the internal design of “git” to Nutanix Engineering team as part of a tech-talk series. Implemented the same in Golang as part of the demo: www.github.com/ssrathi/gogit
- Implemented a scrubbing utility in Golang to redact sensitive customer data from any type of nested structures before logging: www.github.com/ssrathi/go-scrub
(Nutanix engineering blog post: <https://www.nutanix.dev/2022/04/22/golang-the-art-of-reflection>)

Brocade, San Jose, California, US

Product: FastIron series of switches and routers (now part of Ruckus Wireless)

Sr. Software Engineer

Jul 2009 - Nov 2014

- Worked on various stacking related features for the FCX and ICX family of stackable devices, e.g. unit discovery, interactive stacking setup, stack formation, unit replacement, ID assignment, etc.
- Implemented High availability (HA) features to ensure uninterrupted system operation in the event of firmware upgrade or software failure, including data synchronization between two CPUs on a chassis system.
- Worked on security related features, e.g. Access Control List (ACL), 802.1x, MAC-authentication, Policy Based Routing (PBR), etc.
- Led a major release as the development lead - responsible for all aspects from planning to GA from the development side.

SKILLS

- **Languages:** *Current* - Golang, Python, C. *Recent* - C++. *Past* - Java
- **Tools & Software:** Linux, Git, Gerrit, Github, GDB, Jenkins, CI/CD, Wireshark, Nessus & Blackduck security scanners. Familiar with AWS, GCP, Kafka, Cassandra, Docker, Zookeeper, etc.
- **Project Management:** JIRA, Sprint planning and execution, Swimlanes, etc.
- **Manager Tools:** Workday - promotion review, team time, performance review, 360 feedback, team compensation, OKR, etc.

EDUCATION

- **University of Southern California**, Los Angeles (Master of Science, Computer Science, *GPA: 3.8*) **2007-2009**
- **National Institute of Technology (NIT)**, Surat (India) (Bachelor of Engineering, Electronics Engineering) **2002-2006**

SELECTED PATENTS & AWARDS

- **Patent US11086826B2** (*Granted*): First inventor: An algorithm and an implementation to manually join a directory domain from a file server when an end user doesn't want to provide sensitive administrator credentials.
- **Patent US20210344772A1** (*Pending*): First inventor: An algorithm and an implementation to create and manage a local cache on each node of a distributed system using callback methods from underlying database systems.
- **Patent (Filed)**: Co-inventor: Ability to detect and prevent ransomware activity on a file-server without user intervention.
- **Nutanix Superhero Award** for major and vital contributions toward the first GA release of Nutanix Files (**2015**).
- **Best Overall - Winner** of annual Hackathon event at Nutanix, for building a file-sharing service on top of *Nutanix Files* (**2016**).
- Certificate of appreciation from City of Los Angeles for successful deployment and working of [ARMOR](#), a randomized scheduling assistant for checkpoints and canine patrolling units at LAX (**2009**). ([related paper](#))
- Certificate of appreciation from Federal Air Marshal Service (DHS), for development of [IRIS](#), a software program used for allocating officers in passenger flights (**2009**). ([related paper](#))