

# Michael Holloway

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## EXPERIENCE

**Zendesk** | San Francisco, CA (remote)

*Senior Software Engineer*

Sep. 2021 – Present

- Improving the scalability and performance of Zendesk's support ticket storage infrastructure by migrating over 300 TB of archived support tickets from a legacy backend to DynamoDB.
- Headed development of a proof of concept for aggregating streaming product usage data published to Kafka by upstream applications. Authored and circulated a technical design document and engaged with engineering leaders to validate the proposed architecture. Led the development team that implemented the proof of concept using Apache Flink.
- Audited archived ticket system monitors to improve reliability. Added metrics on archived ticket get/set/delete response times and error rates; adjusted noisy monitors to alert only when action is needed; and created runbooks for responding to alerts.

**Wikimedia Foundation** | San Francisco, CA (remote)

*Senior Software Engineer*

Jul. 2020 – Sep. 2021

- Spearheaded the development of a push notifications service for the Wikipedia iOS & Android apps to support user engagement initiatives. Worked with engineering leaders to validate the proposed system architecture and led a team of engineers doing the hands-on implementation work using TypeScript and Node.js/Express.
- Created a set of standardized client libraries (JS, Java, PHP, & Swift) to improve Wikimedia's product analytics capabilities.
- Drove the definition of service level objectives (SLOs) and service level indicators (SLIs) for services maintained by the Product Infrastructure team.
- Mentored colleagues on developing extensions for MediaWiki, Wikimedia's open-source publishing platform, and on working effectively in Wikimedia's technical infrastructure.

*Software Engineer*

Mar. 2015 – Jul. 2020

- Designed a MediaWiki (PHP) extension to fetch image labels from the Google Cloud Vision API for images on MediaWiki Commons, map the resulting labels to Wikidata Item IDs, and serve them to Commons users as image tagging suggestions. Led the development team building the extension. This project resulted in the addition of structured tags to over 300,000 image files.
- Designed and built a system to generate in-app suggestions for contributing to the Wikimedia projects and for tracking suggested edits made through the apps.
- Built APIs and services using Node.js/Express to support new features including link preview popups and featured content feeds in the Wikipedia apps.
- Developed the featured content feed in the Wikipedia Android app.

## EDUCATION

**Columbia University** | New York, NY | J.D.

**Cornell University** | Ithaca, NY | B.A. *cum laude* in Government