

Nif Ward

she/her or they/them

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Experience

Sr. SWE Health Account Access - Cash App (August 2021 - present)

Designed and built [TOTP](#) app support for Cash App Taxes, delivering months ahead of tax season and serving millions of filers. Discovered and formalized existing account security model. Leading and providing technical strategy for monolith-to-microservices migration of 60 authentication APIs, including for PINs, alias linking, and device identity. Built operational review process for Health Server Engineering.

Tech stack: Kotlin, Java, DynamoDB, AWS, [Misk](#), SignalFx, Terraform

Groups and Affiliations: Engineering Values working group, Pinpoint Operational Reviews working group, cash-mentorship, promotion calibration panelist

SDE UnifiedAuth - Amazon (June 2019 - August 2021)¹

Built [OIDC](#) client library and local introspection on identity tokens into existing [OAuth](#) implementation for high-performance infrastructure teams. Designed solution to run legacy auth for 10s of 1000s of internal services on ephemeral runtime environments. Led adoption of operational best practices for maintaining high availability and resilience during retail peak events. Mentored 3 new hires who all became SDE II in < 2 years.

Technologies: Java, DynamoDB, AWS²

Groups and Affiliations: Amazon Security Certifier Program, The Edge video podcast, Plugged In video podcast

SDE Knowledge Tech - Amazon (September 2016 - May 2019)

Implemented macros and text parsing tools to facilitate content migration of over 1MM internal wiki pages. Designed and worked cross-team to implement large-scale live event streaming experience. Designed and led implementation of ingestion service to index millions of content artifacts from internal knowledge-sharing tools.

Technologies: Java, PHP, Ruby/Rails, RDS/Aurora, Python, Flask, MediaWiki, XWiki, AWS

Groups and Affiliations: Amazon Security Certifier Program, Amazon Machine Learning University, StackSkills Threat Modeling Workshop (NDC Minnesota 2019)

Software Developer - CardinalCommerce (March 2014 - August 2016)

Designed and built REST API and client library for auditing millions of transactions across distributed systems. Improved development cycle by introducing version control best practices. Managed platform deployments. Built and deployed mobile payment platform features for partners and customers.

Tech stack: Java, C# ASP.NET, Python, SQL Server, MongoDB

Groups and Affiliations: Release Management, Security Certifier in training

Education

Oberlin College, 2009-2013, B.A. Computer Science

FOSS OPW Intern - Mozilla (December 2013 - March 2014)

NDC Minnesota 2019, Threat Modeling Workshop with Laura Bell (StackSkills)

¹ Some projects I worked on for this team are privileged and confidential

² This team's tech stack and toolchain were largely internal and proprietary