G R K Achyuth Nag

♀ Bangalore, KA ☑ achyuthgollapudi@gmail.com **4** 9740123106 • nagadelic.me in achyuthnag ○ achyuth13 ■ achyuthnag

Experience

Software Development Engineer - 2

Bangalore, KA

Nuclei 🗹

June 2024 - Present

- Lead a team of 5 front end engineers in the Retail Banking Product, Merchant Marketplace, driving key business initiatives and delivering revenue generating projects. It's live in 12+ Indian Banks (ICICI, SBI Bhim, BOB and more) and 1 MEA Bank (Sohar International) and we do around 4 Million transactions a month.
- o Developed and launched Nuclei X, an invite-only B2C app to showcase our flagship Android SDK for select key users. Designed and developed the Authentication and Payment Flows, back end and front end, ensuring seamless integration and robust security.
- o Optimized the Nuclei's Android SDK footprint by 56%, reducing size from 14.3 MB to 8 MB, increasing adoption rate of the SDK.
- Boosted the Android SDK performance by offloading compute-intensive tasks to computation threads, achieving a 30% faster initialization time and significantly enhancing user experience.
- o Designed and developed a system to capture, store, and analyze analytics and error events, also built the Android SDK for the same to facilitate real-time reporting.
- Conducted a successful proof of concept to implement rate limiting for a high-cost API, leveraging NGINX header-based routing for optimized traffic distribution and Traefik for dynamic rate limiting. This initiative aimed at significantly reducing egress bandwidth costs while maintaining efficient traffic flow.
- o Mentored interns and college graduates, provide technical guidance, code reviews, and helped accelerate overall onboarding process.

Software Development Engineer - 1

Banaalore, KA June 2022 - June 2024

Nuclei 🗹

- Played a key role in maintaining, securing, and optimizing our flagship Android SDK, ensuring high performance and security. Developed UI flows for both Android Native apps and Progressive Web Apps (PWAs) using SvelteKit and Tailwind CSS for streamlined, responsive user interfaces.
- Revamped the Android Mobile Recharge service frontend, enhancing user experience by introducing tagged recharge plans, an embedded coupon UI, and an improved pricing layout. These optimizations drove a **5%** increase in transaction volume.
- Remediated over 10+ security vulnerabilities like Strandhogg Vulnerability (v1) Z, Achieving SSL Pinning on our PWA applications, and many more, making our Native and Cross Platform categories more secure.
- Built and shipped, Synapse, a product extension of Merchant Marketplace, which offered a Merchant PWA experience to users. This product helped in speeding up or GTM from 3 months to 3 weeks.
- o Contributed to Svelte Vitals, an in-house NPM library, by developing a modular solution for language localization and custom font integration across Svelte UIs. Enabled dynamic font control for each partner by hosting fonts on our CDN, ensuring brand consistency for each partner. Also optimized performance by benchmarking Cumulative Layout Shift (CLS <0.1) and First Contentful Paint (FCP) <1.0 using Lighthouse to ensure seamless user experience.
- Built an in-house crashlytics tool called No Errors Uncaught that could decrease error count by 50% and Incident Response from 1 day to 1 hour.
- Migrated the Android SDK to Android 13 and eventually Android 14 within the given sunset timelines by Google. Involved challenges of keeping the SDK backward and forward compatible for partners to adopt the SDK as and when they needed it.
- Automated Slack reporting workflows to streamline production issue tracking and partner-raised integration concerns, significantly improving response times and boosting overall team productivity.

Software Development Engineer - Intern

OrgFarm

Bangalore, KA Jan 2021 – Feb 2022

- Developed ERP forms in the Warehouse Admin Service using React JS with REST APIs, to help the warehouse personnel track the various operations that are carried out by the company.
- Assisted in designing the DB for the product.

Education

Nitte Meenakshi Institute Of Technology

Aug 2017 - July 2021

B. E in Information Science and Engineering

o CGPA: 8.68/10

Projects

GoGet Github ☑

- An interactive mobile application that connects users to local grocery stores(kiranas), and recommends the best store to the user to purchase the groceries from. The main aim of this application was to increase the business of the local grocery stores by arming them with a digital platform, in turn leveling the playing field of the current market.
- Analyzed the current grocery market to gain insights.
- Integral part of formulating the main logic that powered the recommendation.
- o Tools Used: Flutter, Dart, Google Maps

Go Benchmarks & POCs

Github 🗹

- Developed a proof of concept to implement consistent hashing Z in Go, exploring its potential for canary release strategies. The experiment demonstrated how consistent hashing can be used to efficiently distribute traffic across different service versions for controlled rollouts.
- Explored and optimized data handling by testing the effects of passing by **\(\mathbb{L}\)** value vs. reference, analyzing memory allocation and performance impacts.
- Understood parallelism solutions in Go, leveraging **goroutines** to calculate prime numbers concurrently, improving execution speed and understanding concurrency handling **\(\mathbb{Z}\)**.
- Built a custom **thread pool** 🗹 in Go to manage concurrent tasks, improving resource utilization and optimizing processing time.
- Investigated database storage techniques for variable-length integers 🗹 and their impact on storage efficiency and retrieval speed.
- o Tools Used: Go

Achievements and Publications

- Won Nuclei's Internal Hackathon (competing against 10 teams) by developing No Errors Uncaught, a solution to address the absence of logs and improve error tracking.
- Placed Second (of 20) in a coding competition organised by the college's coding club, optimizePrime.

Technologies

Languages: Java (Fluent), Kotlin (Intermediate), Javascript (Intermediate), HTML (Intermediate), Tailwind CSS (Intermediate), Dart (Intermediate), Go (Novice)

Technologies: Android, Sveltekit, Flutter, MVP, MVVM, RxJava, SDK Building and Integration, WebViews, PWA, HTML, CSS, NGINX (novice), CDN, Github Actions

Interests: Violinist, Musician, Composer, Arranger, write my own music 2 and an active part of my band, Caramel Chutney.