Shivam Rathore

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"Loyalty is a two-way street. If I'm asking for it from you then you're getting it from me."

EDUCATION

NIT BHOPAL
B.Tech • Computer Science
Grad. May 2019 • Bhopal, MP
Gross GPA: 8.23 / 10.0

JAORA PUBLIC SCHOOL
High School
Grad. May 2015 • Jaora, MP
12th %: 92.6

LINKS

Webpage: shivamrathore.com
Twitter: @010Shivam
GitHub: @Shivam010
LinkedIn: @shivam010
HackerRank: @Shivam010

SKILLS

PROGRAMMING

Languages & Databases:
GoLang • C / C++ • *Python* • JavaScript
GraphQL • TypeScript • *Shell Script*
MySQL • *PostgreSQL* • Redis

Mobile & Web Frameworks
React & Flutter *(Working knowledge)*

Tools, Technologies & others:
Git • Shell • *Protocol Buffers & gRPC*
DevTools • *Docker* • Agile process

IDEs & Editors
JetBrains IDEs: GoLand • DataGrip
SublimeText3 • *VS Code* • Brackets

Familiar Environments
Mac • *Linux* • Windows

SKILLS

ARCHITECTURE

Micro-services
Using REST, gRPC & GraphQL

Component Based
Using Domain Driven Development

EXPERIENCES

APPOINTY   May 2018 – Present
Lead Software Engineer
- *Liaising* with team members, management, and clients, and *reviewing code* to ensure projects are completed to the standard
- Leading the design & development of our new *SaaS development platform, Saastack*
- Developing and contributing to different Saastack *architectural layers* like Authentication, Roles and Rights, Licensing, and default libraries
- Building *a plug-and-play, secure and regulatory compliance* backend architecture model for Saastack *in Golang*

Sr. Software Engineer ~ 1.5 Years
- Single Handedly Designed & Developed the *customized booking solution* & availability logic for *our biggest client – Mathnasium*
- Designed And developed a *generic solution* for *data tracking* and *reporting system* in Appointy.
- Developed a generalized solution for the *identification and protection of user's PII*: Personally Identifiable Information
- Provide *Secure, Clean and Efficient code review* in the team
- Developed internal tools and applications to increase developer productivity

Software Engineer ~ 1.5 Years
- Structured & Implemented several internal systems comprising the *Core Scheduling Services*, like *appointments* and *meetings* scheduling, & *availability*.
- Designing & developed a *PostgreSQL typesafe ORM for GoLang*, named as *Chaku: described in Projects section.*
- Became the integral part of the core design & development team on the *Google: REWS Scheduling & Managing* project for Massage and Fitness management.
- Helped in designing a Go-framework for building *a spec-compliant GraphQL server in Go* by extending & analyzing an existing framework *samsarahq/thunder*

Software Engineer Intern • 2 Months
- Worked on an Enterprise Project Deal for *Google: the REWS Scheduling and Managing* system software since its designing phase.
- Worked on DDD (Domain-driven design) and Micro-Services Architecture
- Technologies: gRPC, GoLang, Rest API, PostgreSQL, Micro-Services
- Developed services to *send & manage* notifications e.g. *emails & sms*
- Worked on various *plugins and tools to automate repetitive* processes

PROJECTS

POSTGRESQL TYPE-SAFE ORM   Maintainer
Dec 2018 – Present • Appointy
- Designed & developed a PostgreSQL type safe ORM for GoLang *using Protocol Buffers as its IDL* - Interface Definition Language,
- The key features include: *Type-Safety* using code generation, *run-time query generation*, *high performance* for a complex IDL structure, and a *simplified database migration* process.
- It helps in *saving a large amount of development time* by eradicating SQL-query writing time with the set of type-safe functions & has *saved ~80%* of developer's work in the micro-service's storage management.
- At Appointy, we call it *Chaku - Indian Knife for Database*. And is the basic building block of all micro-services involving database interactions at Appointy

COURSEWORK

UNDERGRADUATE

Data Structures & Algorithms
Functional & Meta Programming
Theory of Computation
Concurrent & Asynchronous Prog.
Compiler Design
Operating Systems
Computer Networks
Unix Tools & Scripting
Code Generation & Automation

INTERESTS

Marvel comics
Rowling's Wizarding World
Mystery-Thriller-Suspense Novels
Exploring Google Maps
Space Science & Geography
Adventure activities

PROJECTS

GOOGLE REWS MANAGEMENT DEVELOPER
May 2018 - June 2019 · Appointy

- Google REWS Management by Appointy *manages Employees' perks and benefits* (free-paid and all) in Google.
- From Massage & Fitness *appointments* to Gyms & Food *Teaching Classes* even the *providers & vendor's management*, everything is covered in it.
- Helped in designing the *micro-services* and the backend logic based on the *domain-driven design*.
- Developed & designed *core-essential services & workflows* like appointments bookings & service availability, overall Reporting, *background tasks & CRON jobs-workflows*, membership & staff managements to name a few.
- Integrated many tools and helped in some of them, like: Google Calendar, G-Suit, Stripe payments, Google docs and sheets.
- Project is currently running *live on all Google locations* throughout the globe.

BACKGROUND WORKFLOW MANAGER MAINTAINER
March 2019 - Present · Appointy

- It manages all of *Appointy's notification channels*, like *email*, *SMS*, *web alerts*, *calendars*, *mobile notifications*.
- We also use it to handle some extensive *data reporting*, *& processing flows*.
- Along with all that, the *payment subscription & membership models* are all also, running in the Background manager.
- It is completely written in *Golang* and uses *gRPC* protocol & *NATS messaging* system for communication, and *PostgreSQL* for storage.
- It is durable, scalable and highly available. It provides a very concrete & precise control over the concurrently executing workflows.

IAM - ROLES & RIGHTS POLICY MODEL DEVELOPER
May 2019 - Present · Appointy

- IAM - Roles & Rights Policy Model is AppointyX's & Appointy's SaaStack's core service for *managing and evaluating* user's *access and permissions* in the API.
- I maintain & own the *Role creations and evaluation* module in the service and help develop the user's access control model.
- It uses *pattern matching and identification* for calculating and evaluating user's *access to any endpoint* & even to the *individual argument level*.
- Written in *Golang*, it uses a *3 level storage system*, with *in-memory as primary* and *Redis as secondary* cache, and *Postgres* database as the main storage system.

OSS PROJECTS GITHUB
nitishm/go-rejson · Maintainer

- go-rejson is a GoLang client for *RedisLabs' RedisJSON module* with support for *multiple redis clients: go-redis/redis* and *redigo/redis*.
- Link to the project: *https://github.com/nitishm/go-rejson*

xqueries/xdb · Contributor

- An *experimental distributed SQL database*, with focus on a readable code-base before performance.
- Link to the project: *https://github.com/xqueries/xdb*

go-freeGeoIP · Maintainer

- A Golang client for *Free IP Geo-Location API service: freegeoip.app/* with inbuilt support of caching to overcome the 15k per hour rate limit.
- Link to the project: *https://github.com/Shivam010/go-freeGeoIP*

nitishm/vegeta-server · Contributor

- A RESTful load-testing API server for *tsenart/vegeta*, *a load testing tool* written in Go, providing users a REST API model for load testing
- Link to the project: *https://github.com/nitishm/vegeta-server*