

Trilok Kumar

Project Manager- Research & Development

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Summary

- A problem solver, multi stack developer with experience of more than 9+ years in problem solving, research and development and proven track record of delivering in multiple technology and business domains.
- Currently working as a Project Manager cum Senior Developer managing and actively involve in development of multiple projects in RUBY and multiple Projects of GBS also.
- Deliver work in multiple tech stack [Front-End, Back-End, Dev-Ops, Cloud] in the domain of IOT, Payment & Banking, Health, Insurance, Custom-ERP
- Involve in architecting and development of more than 20+ Projects from scratch. Lead Developer in more than 40+ projects, so far and list goes on.

Skills

Algorithms	DataSetructure	Automation	RPA	Problem Solving	Python	Agile/Scrum	Product Development
Project Mnaagement	JIRA/Open Project/Azure Board	Confluence	C#/Java	OOPS/Design Patterns	Angular/react	Node Ja/Next JS	GitLab/GitHub /SVN
WebDeveloemnt	RabbitMQ/NA TS	OPC-UA/MQTT	SignalR	MongoDB/Pos tgress	Dynamo DB	SQL Server/MySQL	AWS/AZURE
Google Cloud	S3 Bucket/Route 53	VPC/Lambda Hosting	Linux	Networking	IPV4/V6	System Design	Docker
Networking	Kubernetes	SigNoz	ElasticSearch	Graffana/Prom etheus	CI/CD	Shell Scripting	Discrete Maths
Software Engineering		Resource Management/ Planning	Expectation Management	Web API	GraphQL		

Education

G.B. Pant Govt. Engineering College, Bachelor of Computer Science, 2010-2014

Experience

Project Manager- R&D

Windmoeller & Hoelscher India | 02/2023 – Present | Delhi, India

Roles & Responsibilities

- Managing a RUBY team of 6 developers and multiple projects (**10+**) of RUBY. Overall work delivery responsibility from WIN.
- Project manager cum developer for two projects of GBS (**IXON router app and Robotic Process Automation for PDE**), develop the POC app of both projects.
- Project management activities for AVENTUS.
- Actively involve in research & development in multiple projects. Review the development work of all developers of WIN.
- Expectation management and Active collaboration with different product owners of different project, Task planning and overall project execution planning, resource handling.

Key Problem Solved/Milestones

- **WIN RUBY Team expansion**
 - Trained and mentored the fresh college graduates in-line of RUBY Development standard. Convince the stakeholders to create a new Team of freshers. Involve in training and mentoring. Currently this team is doing majority of new Front-End Development in RUBY. Because of their good work they receive the praise from the Product Owner.
- **Application performance improvement by more than 5X.**
 - It was a common customer pain that in RUBY Check job page takes lot of time to load, sometime more than minute and even crash the browser for specific customers. Re-architect and re-written both Front-End and Back-End, which eventually leads in drastic improvement of speed and performance.
- **Robotic Process Automation of Manual Process**
 - Currently Project in POC stage, there are 4000 machines for which PDE teams need to perform validation. Average 10-15 machine can be done manually in a day, which is time consuming process. To solve this automation of excel and browser done which helps in validation of 300+ machines(currently automation results are in verification stage of PDE team), which happens within couple of hours. As manual process uses application like SAP and other window application, currently research is going on it.

Senior Software Engineer-R&D

Windmoeller & Hoelscher India | 12/2019 – 01/2023 | Delhi, India

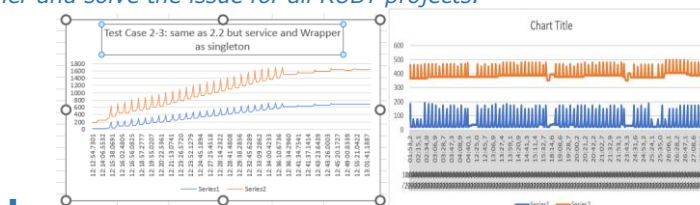
Roles & Responsibilities

Worked on multiple technology stack tools and languages including Back-End, Front-End, Dev-Ops etc. on multiple projects of RUBY.

- Lead Developer of RUBY Check System (belongs to GBD) total 10 projects. Involve in managing and active research & development of all these projects.
- Developed multiple projects from scratch like
 - **PDF-Generator** developed the state-of-the-art tool for report generation. It can fully customizable dynamic reports of any size with live data of different Ruby extension. In market lot of report tools available, they are difficult to customize and have separate learning curve.
 - **License Manager** State of the art application to manage the **licensing** of all RUBY extensions. All the data endpoints are secured by the license check.
- Research on prevention of reverse engineering of code and protection of patented application code. Perform different level of obfuscation and prepare POC application.
- RUBY infrastructure development and management. Making RUBY up to date with latest library and frameworks.
- Perform the Development of other RUBY projects depending on the need.

Key Problem Solved/Milestones

- **WON Multi Cloud App Hackathon**
 - As cloud is ubiquitous solution. sticking to one cloud provider is not a viable solution in many cases. Every region has their own political regulations, sticking to a specific cloud might be problem there. Therefore, a Hackathon is Organized to develop a concept application which can switch to different cloud provider seamlessly. My proposed solution also one of the accepted solutions and received the prize for the same.
- **RabbitMQ memory leak issue fix**
 - We are using Rabbit-MQ as our queuing tool. We observe that in case of higher payload memory leak happened, which eventually leads to the crash of docker container (RUBY extension). Thoroughly done the Investigation by plotting different Heap & Stack memory graph, eventually I find the issue in library callback, which is not releasing memory, refactor the library with Library Owner and solve the issue for all RUBY projects.



- Here left image shows that with the time memory is hold up, eventually leads to the crash of the system.
- Here right image after my fix, which shows that memory rises upon each request and release up after finishing of the request. So, no more memory leak.

- **Prevention of reverse-engineering and security of patented code**
 - W&H machines shipped with Procontrol and inspection system software, some of the technology is patented and written in form of code. There is a very much chance that competitor/hacker can deconstruct the code from executables. To prevent this reverse-engineering, I research out the various tools and perform the different degree of code encryption/obfuscation and successfully demonstrate the prevention of reverse-engineering. Findings are shared with FED-2 Team of GBD team as I mainly do this research for them.

Senior Software Engineer

Chetu Inc. | 01/2018-11/2019 | NOIDA, India

Roles & Responsibilities

Worked here as Lead Developer, Senior developer on multiple projects in multiple domains of Payments, ERP, Insurance. Company is a service-based company providing software solutions primarily to U.S. markets.

- Worked as a lead developer on a Payment project of US based leading payment solution provider on there multiple products including Payment Gateway, Merchant Portals, Chargeback Management System and interface development and communication with different payment processor providers.
- Worked on the project of aviation insurance start-up as Lead developer, develop the solution using React, AWS-Lambda, DynamoDB, Route53, .Net Core, API gateway, Auth0 as single sign on.
- Worked and lead the team of three developer for a ERP platform implementation for a travel agency based in US as client is authorized travel agent and cargo shipment for CUBA. We need to create a portal for cargo tracking, Passport tracking, VISA status tracking, Photo Booth
 - Implement the Passport, VISA, and Cargo tracking portal.
 - Implement the Barcode generation, and its tracking implementation.
 - Integration with Android Phone. Customer can see the status of their Passport/VISA/Cargo through APP.
- Work on the fleet tracking project, here work on the migration of SQL Server from BareMetal to AWS Cloud. Integration and implementation of AWS SQS with API gateway and Lambda Function.

Key Problem Solved/Milestone

- Handle and manage the entire communication on Payment projects from Indian Team (6 dev, 4 QA) and deliver the quality development without any major issue. The Payment Project is awarded the Quarter Best Project from 400+ running project of company.
- ERP Project awarded the project with best coding standards, architecture, and documentation process.

Software Engineer

AtDrive Inc. | 02/2016-12/2017 | NOIDA, India

Roles & Responsibilities

A Software service startup Company. Work here on almost all web development framework including PHP, .Net Web Forms, Java Server Pages, Work on the windows projects as well as word press projects also.

- Work on the health industry projects here. Lead the development and develop lot of projects from the scratch here.
- Develop a complete patient and doctor management portal with HIPPA compliance.
- Develop multiple portals for mental health, patient progress tracking etc.
- Lead the development of a application similar to Facebook for African customer. Work on Graph algorithms.
- Work on the window application development using WPF, PRISM and WCF.
- Work on WordPress projects also and handle the communication with customers.
- Work on the programing of different animation like Parallax effect etc. using CSS and Three.js.

Associate Software Engineer

Center for Development of Telematics. | 08/2014-01/2016 | Delhi, India

It's a government of India, R&D organization. Building state of the art networking devices and research. Started my career here as trainee engineer.

- *Learnt the fundamentals of networking and Linux. Part of Tera-Bit Router Development team, I learnt holistically about the Different layers of networking, starting from physical layer till IP layer.*
- *Learnt the Linux system fundamentals and Kernel Programming and management of network ports. Work extensively on configuration of daemon process, process management and memory management and tracking and removal of zombie processes.*
- *Learnt the python and use it for writing the build script to test different network topology like VLAN etc. I also read several RFC documents for IPv4 as well as IPV6 and make the topologies on the routers for the testing and use different tools like Spirent test center and Wire-Shark.*