

# Prasenjit Kumar Nag (Joy)

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## Summary

Current Senior Technical Lead at Bellroy. 9+ years experience specializing in backend development. Super tech-savvy who loves Vim, NixOs and OSX and enjoys working on all layers of the stack. Nurtures growth mindset, believes in deliberate practice and takes every challenge as a learning opportunity. Experienced in converting complex ideas/business requirements into functional solutions using the right tools, following good architectural principles and best practices.

## Skills

<b>Back-end</b>	Ruby On Rails, Resque/Sidekiq, Dry-rb, Redis, Memcached, PostgreSQL, Laravel, REST API
<b>Front-end</b>	Elm, React, Redux, HTML5, SASS, Webpacker
<b>DevOps</b>	AWS, Docker, Kubernetes, Vagrant, CloudFormation, Terraform, AWS CodeBuild, CodePipeline, EMR, Athena, Redshift, Aurora
<b>Programming</b>	Ruby, PHP, Haskell, ReactNative, SQL, Bash Script
<b>OSes</b>	OSX, NixOs, Ubuntu, Debian
<b>Languages</b>	Bengali, English

## Experience

### Bellroy (TrikeApps was merged into Bellroy in Apr. 2018)

Melbourne, Australia

SENIOR TECHNICAL LEAD

Nov. 2017 - Present

- Actively participating in architectural discussion with Senior Devs to clarify and document architectural goals.
- Guide juniors on individual stories to provide big picture and ensure code quality.
- Regularly perform code reviews to encourage best practices.
- Lead EDI (Electronic Data Interchange) integration efforts for multiple high-profile clients.
- Built ETL pipelines for syncing orders from digital marketplaces. Wrote a parser to generate rails migrations from API spec for core business entities of interest to optimize the time spent to build future ETL pipelines.
- Supported the business with technical requirements for a business entity restructure.
- Wrote a caching layer for a throttled external API which has saved > 5M API calls (171 days worth of API calls), which has saved systems from being blocked countless times.
- Wrote a Background job throttler which can automatically filter low value background jobs and defer them to next day (while it was running low on external API calls for the day) to be retried automatically so critical business processes could continue running. This saved a lot of tech support time.
- Worked with a colleague to plan and move multiple self-hosted postgres databases into AWS aurora without much downtime. Performed mental simulations and upfront analysis to cut down disruptions of business processes.
- Implemented a generalized shipping alert rules which allowed Logistcs to flag shipments that matched certain criterias to enforce better business processes.
- Participated in and heavily contributed to a massive refactoring of a order fulfillment pipeline, following clean architecture practices, which led to the system processing 200K+ background jobs without a single failure on a recent sale spike in 24 hours.
- In an effort to build a CI/CD pipeline on AWS, migrated CI from Travis to AWS CodeBuild. Used AWS CloudFormation to build the stack (including Docker images). It also cut down cost by 70% while also cutting down spec run time for our largest project by several minutes. Also Built an Elm component for internal dashboard to show CodeBuild build statues.
- Spent personal time to build a demo CD pipeline from scratch on EKS using first Terraform , then cloudformation with Blue/Green deploys which contributed to the approval of CI/CD project.
- Paired with another dev to build a staging Kubernetes Cluster on EKS using cloudformation, following good networking and security practices to progress on the CI/CD project.
- Spent personal time to build Grafana dashboard and add hubot (with slack integration) to encourage DevOps/chatops practices.
- Leading data migration effort of an undergoing ERP integration project.

### TrikeApps

Melbourne, Australia

TEAM LEAD

Apr. 2017 - Oct. 2017

- Contributed to creating an internal DSL for specifying shipping rules in primary client's e-commerce store which allowed specifying complex shipping rules.
- Prepared internal systems to be able to work with (with the accounting system integration) a business entity change for primary client.
- Managed 2 other Junior devs, participated in sprint planning and estimation and organized retrospectives.
- Took the responsibility of meeting with Transactions team weekly, and worked closely with them to maintain and support the rapid growth of the business.
- Integrated multiple new digital marketplaces, including automated order fulfillment, settlement/payment report processing etc.

## TrikeApps

Melbourne, Australia

RUBY DEVELOPER

Apr. 2016 - Apr. 2017

- Upgraded multiple internal apps to Rails 5.
- Added Apple Pay Payment method on primary client's e-commerce store which significantly increased conversion from qualifying Safari users.
- Built a S3 backed drag-n-drop product image management system for primary client's e-commerce store.
- Converted a legacy ruby app into a Rails one for consistency.
- Wrote a data/business validity checker which let others write SQL queries to run periodically and report them on business critical processes without help from tech support.
- Built and maintained a self-hosted analytics platform (Snowplow) for the data analytics team, involved learning about, setting up and maintaining the full stack including AWS CloudFront, Hadoop/Spark jobs, AWS Athena, AWS Redshift. This supported high performance, low overhead batch event processing for all systems.

## Astute Payroll

Melbourne, Australia

PHP SOFTWARE DEVELOPER

Feb. 2016 - Mar. 2017

- Refactored the document management system from legacy code to S3 backed clean component using Twig templates.
- Refactored payslip rendering service to a domain service which was then used in cli, API and user facing features.
- Wrote a robust regression tester script in PHP which could generate thousands of payslips using old and new renderer and report on differences to build confidence before cutover.
- Worked on third party integrations.

## Adgate Media

Remote

WEB DEVELOPER

Feb. 2015 - Jan. 2016

- Implemented complex ideas into working solutions using Laravel.
- Used OOD best practices to produce testable functional code.
- Learnt about Unit and functional testing and started following TDD.
- Built a multi-room chat functionality with ReactPHP on the backend and ReactJS on the frontend with Websocket and ZeroMQ (with support for custom commands).
- Added real-time frontend update support via websocket, to deliver critical information without page refresh.
- Built cache decorators with repository patterns to make caching layer transparent.
- Used AWS SQS for background job processing.
- Built a permission system which allowed feature restriction on user level.

## Noobis Inc

Dhaka, Bangladesh

SOFTWARE ENGINEER

Jul. 2011 - Sep. 2015

- Analysed client specifications and project requirements, and turned them into functional solutions.
- Prepared regular progress reports.
- Updating and Maintaining a large Magento installation including operational maintenance (learnt a lot about linux server administration).
- Developed in-house apps with Laravel and AngularJS.
- Identified and communicated changing priorities and business objectives to other team members and distributed workload.
- Built MVPs for investor presentations.

## Allmoxy Inc

Remote Part Time

WEB DEVELOPER

July. 2012 - May. 2013

- Added various reports into the existing app which gave more insight into the business.
- Extended the custom MVC the client was using with more features.
- Extended the frontend built with PrototypeJS with more features.
- Created a documentation framework which let the customer support add video walkthrough and in turn saved time on support ticket resolution.

## Leevio Inc.

Remote Part Time

WEB DEVELOPER INTERN

Dec. 2009 - Jun. 2011

- Learnt about VCS (subversion).
- Contributed to the development of inhouse and client apps.
- Built few mobile apps with Titanium.
- Learnt and used Zend and CodeIgniter PHP frameworks.

## Education

### Rajshahi University Of Engineering And Technology

Rajshahi, Bangladesh

B.S. IN COMPUTER SCIENCE AND ENGINEERING

Feb 2007 - Aug 2011

## Relevant Community Services

### Quantum Foundation

Dhaka, Bangladesh

MOBILE APP DEVELOPER

Jul. 2016 - Oct 2018

- Volunteered to develop a localized Android app (using Java) and an IOS app (using ReactNative) for the non-profit. They are on [Google Play Store](#) and [iTunes App Store](#) and being used by many.