

Dinika Saxena

Software Engineer

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PROFESSIONAL STATEMENT

I am a software engineer specialized in **web-development**. I like to work in autonomous teams and engage in all stacks of feature development - from gathering their requirements and planning, to shipping and monitoring them in production. I deeply value **automated testing** and principles of continuous integration and delivery and I love to work on improving systems around them in engineering teams.

WORK EXPERIENCE

Oct-2020 Present	CERN - Geneva, Switzerland	Software Engineer
Developed applications that are used in the monitoring and control of the <u>LHC</u> in the Beams Department. Some examples of my work are:		
<ul style="list-style-type: none">• Improved performance of a Vue application during situations of alarm avalanches at CERN. With the improvements, the app was able to process and render more than 100k alarms in ~35 seconds compared to 10k alarms in ~6 hours. Memory usage improved by 81%.• Built a system for streaming messages from devices at LHC to browsers to allow creation of dashboards with over a 100 simultaneous subscriptions using websockets, and RxJS.• Setup and helped standardize CI and CD systems for several applications using Jenkins and Ansible.• Worked as Technical Lead in a team of 4 developers for migration of legacy application to newer stack of Angular and Java.• Guided the team towards writing more automated tests and setup infrastructure for e2e testing in development and CI/CD environments.		
Technologies: Vue, Angular, TypeScript, Java, Spring, SQL, Cypress, Karma, Jasmine, JUnit, Gradle, Jenkins, Gitlab CI, Ansible, and Docker.		
May-2019 July-2020	Minna Technologies - Gothenburg, Sweden	Software Engineer 
<ul style="list-style-type: none">• Lead engineer in the design, development, and documentation of RESTful API services (named “insights”) that allow consumers to show changes in the end-user’s subscription economy.• Increased user retention in app by 38.4% by development of front-end features (like new on-boarding process for users, and sending push notifications) and validating hypothesis through A/B tests.• Enabled unit testing in frontend by setting up and configuring test environment for our projects using Jest and react testing library.• Made debugging of bugs easier by exporting anonymized user data to internal admin tools, and enriching sentry logs with redux state snapshot.		

Technologies: React, Redux, TypeScript, Scala, Akka, Cypress, Jest, MongoDB, Kibana, Sentry, Google Optimize, Mixpanel, and Scrum

Sept-2017
Oct-2018

CERN - Geneva, Switzerland

Technical Student

- Migrated the front-end architecture of Inspire from Angular to React, making it responsive and increasing the test coverage by 67%.
- Developed a dashboard to help fix errors that occurred while synchronizing data between the legacy system and the new application.
- Conducted user testing and created mockups using Figma to improve UX based on the user feedback.

Technologies: React, Redux, Jest, Enzyme, Puppeteer, Figma, Scrum

June-2016
Aug-2016

CERN - Geneva, Switzerland

Summer Intern

- Developed a dashboard that used data visualization to represent the architecture of OpenStack cloud resources at CERN

Technologies: D3.js, Dimple, SVG, JavaScript, HTML, CSS

CONTRIBUTIONS TO OPEN SOURCED PROJECTS

- Helped write ansible playbooks to automate configuration of 3 raspberry pis servers on a rack. ↗
- Contributed to development of an application that automates tracking of expenses and splits the cost among participants. ↗
- Extended feature of an Angular datepicker component to select the highlighted date when user blurs the datepicker. ↗
- Added a feature to undo steps in a game. ↗
- Minor documentation improvements on the prettier project.

PERSONAL PROJECTS

- Migrated CI/CD pipelines of an application from Jenkins to Gitlab CI.
- Developed a browser extension that implements a 'flash-cards' like utility by showing users saved notes when they open new tabs. ↗
- Used GraphQL to design API for performing CRUD operations on blog posts. Also used node, express, mongo, mongoose, & socketio. ↗

EDUCATION

- B.Tech in CS from University of Delhi (2013-2017) Received an aggregate of 93% and an award for 3rd highest GPA in the university

SKILLS

Advanced	Intermediate	Beginner
JavaScript & TypeScript	Scala	GraphQL
Java & Spring	MongoDB	Akka
Git	Bash	D3.js
Web Components	Gitlab CI	Ansible
Angular, Vue, & React	SVG	Google Cloud Platform
CSS & HTML	Docker	
RxJS	Spring	
SQL	Sentry, Kibana, Grafana	
Jasmine & Karma	Jest & Enzyme	
Cypress		
Messaging (WS & STOMP)		
Figma		
JUnit		
Jenkins		