## Manas Pande

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EDUCATION University of Waterloo, Waterloo, ON

Bachelor of Computer Science, Co-op Class of 2021

Personal Projects

## **Indian Blood Banks Application**

Developer December 2016

Created an Android Application in Java that lets users find blood banks by district or state. The application contains data for more than 2900 blood banks, and provides address, contact information, and more. The application is not official and has not yet been released in the app store. I developed the application to learn about android development, SQLite databases, RecyclerViews, CardViews, and the Google Maps API.

- Retrieved the blood banks information from the Indian Open Government Data Platform. Created an SQLite database using the information, and made a simple application that queries data from that SQLite database.
- Used spinners (with state and district names) for making queries. Since the number of districts was quite large (around 700), and manually inputting the district names to a string-array for the spinners seemed tedious, I wrote a function in Java that took the district names as csv and returned them as items in a string-array.
- Displayed the results in CardViews. Used Google Maps API Geocoder to mark the addresses on a map. Used some material design principles to create a clean UI.

## **Indian Railways Application**

Developer January 2017

Developed an Android Application in Java that lets users get live information about their ticket, train status/schedule, seat availability, and more. The application is not official and has not been released in the app store. I created the application primarily to learn how to work with REST APIs, JSON server responses, AsyncTasks, and material design.

- Used OkHttp to make network requests to a REST API. Used CardViews to display the information, making the UI compact and more appealing.
- Implemented train name/number and station code auto-complete. Here, the application sends requests to a REST API containing the partial information the user has put in and displays a list of matching trains/stations to choose from. The performance here is not very decent since the API sometimes takes a long time to respond.
- Learned how to work with JSON server responses, and used material design principles to create a simple UI.

## Personal Website

Developer, manaspande.com

December 2016

Created a personal website using HTML, CSS, and JavaScript to link to my GitHub, e-mail, and resume. Made the website responsive using CSS flexbox, and used FontAwesome for the icons. Also made sure that the website is mobile-friendly.

Programming Experience Languages: Java, Python, HTML, CSS, JavaScript, PHP, Racket Libraries/Frameworks: jQuery, OkHttp, Volley, BootStrap

Technologies: Git, Android Studio, MySQL, LATEX

Concepts: Mobile UI/UX, REST APIs, OOP, JSON, Networking, Databases