# Jashandeep Singh

ASPIRING SOFTWARE ENGINEER · COMPUTATIONAL MATHEMATICS

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#### Education

#### University of Waterloo

Waterloo, ON

Remote

HONOURS BACHELOR OF COMPUTATIONAL MATHEMATICS. STATISTICS MINOR

Sep. 2017 - Aug. 2022

• Courses: Object-Oriented Programming in C++, Data Structures, Cryptography, Approximation Algorithms, Combinatorics

### Skills

Languages Python · Go · C++ · Kotlin · Java · C · Javascript · SQL · R · Bash · HTML/CSS

Tools React · NodeJS · Express · Android Studio · PyTorch · MongoDb · Git · PostgreSQL

# Experience \_\_\_\_\_

#### Freelance Developer - SOCA

WER DEVELOPER June 2022 - Aug 2022

• Built an interactive website in React for a cricket league played in Southern Ontario by 16 teams every year

• Enhanced load time by 15% by implementing website's state to be managed using redux and lazy loading the images

• Increased traffic by 50% by rewriting the entire UI using responsive react components and user interactive features

Petro-Wagon Chandigarh, IN SOFTWARE ENGINEER Aug. 2019 - Sep. 2020

· Developed an Android app for an online fuel delivery service based startup from scratch

- Pioneered company's successful pilot project and beta version of the app gained over 200 B2B clients in a span of 1 month
- · Maintained clean and structured code using MVVM architecture to enhance reusability and optimized app performance

**Stark Softwares** Beas.IN May. 2017 - Aug. 2017

**TESTING ENGINEER** 

· Automated testing that will be performed at all layers of programming interfaces and resolved UI/UX issues

• Effectively wrote clean and reusable code for designing templates for their clients and performed troubleshooting

# Projects \_\_\_\_

### iRead | Java, SQL, XML 🕡

- Developed a book reading android app with a collection of more than 0.5 million books from Google Books API
- Designed and implemented the database using SQL, allowing users to create their profile and save favorite quotes within app
- · Designed an interactive and consistent UI which displays books in customizable categories like favorites, current readings

### Flower Prediction | Python, Flask, PyTorch

- Implemented a Convolutional Neural Network (CNN) trained on VGG19 model from PyTorch that uses image recognition and supervised machine learning algorithms to predict the name of the flower
- Trained the model using a dataset of more than 8 thousand images and minimized overfitting to achieve a prediction accuracy of more than 85%
- Deployed the model into a web app to classify the species of flower present in the image uploaded by user

### TODO | React, Express, Node.is

- · Built a full stack web app where users can organize their daily tasks to make the most out of the day consistently
- Users can update a task into 3 categories: To-Do, Done and Doing which helps them stay organized
- · Implemented a database for tasks which allows users to examine their past performance which increases productivity

### Game of Chess | C++

- Developed in C++, a fully functional game of Chess played using command line
- Implemented human vs computer version of the game using min-max algorithm to generate optimal computer moves
- Improved performance and code reusability by using OOP principles and design patterns like observer, decorator

## Awards

- President Scholarship of Distinction \$5000
- · All India 903 rank in Math and Science Competition held among high school students