

# VISHRUT AGRAWAL

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## EDUCATION

**University of Illinois at**

**Urbana-Champaign**

B.S. in Mathematics & Computer Science

May 2021 | Champaign – Urbana, IL

**La Martiniere School for Boys**

Economics and Commercial Studies

Class of 2017 | Kolkata, India

## LINKS

**Website:** [vishrut.me](http://vishrut.me)

**GitHub:** [github.com/vishrut3](https://github.com/vishrut3)

**LinkedIn:** [linkedin.com/in/vishrut3/](https://linkedin.com/in/vishrut3/)

## SKILLS

**Programming Languages:**

Java | Python | C++ | HTML | CSS

**Programs/Platforms:**

Git | SVN | Unix/Linux | Unity | IntelliJ

| Android Studio | Unit Testing | Xcode

| OpenFrameworks

**Spoken Languages:**

English | Hindi

## COURSEWORK

- Software Design Studio (Java and C++)
- Discreet Structures
- Introduction to Computer Science (Java and Android)
- Calculus I
- Calculus II
- Introduction to Statistics

## ORGANIZATIONS

- Association for Computing Machinery
- Association of Data Science and Analytics
- Illinois Programming League
- Special Interest Group for Artificial Intelligence
- Illini Muay Thai

## PROJECTS

**Calculator Application | December 2017**

- Developed a calculator application capable of computing simple arithmetic operations, quadratic and simultaneous equations, and finding the mass of chemical elements.
- Used Java and Android Studio to make the application.

**Software Design Studio Coursework | January 2018 - Present**

- Created various projects and programs in Java and C++ every week as part of the coursework for Software Design Studio.
- Created JSON files containing the data for a text-based game and a computer simulation program for a restaurant, and wrote programs to parse the files and implement the game and the simulation.
- Implemented a game engine for the Gin-Rummy card game program that takes in two different player strategies and competes them against each other; Created three different kinds of player strategies to test and compete in the game.
- Wrote a simple machine learning image recognition program to recognize numbers from images using the Naive Bayes probabilistic classifier. Trained the program to recognize numbers using 5000 images, and then used another 1000 images to test the program.
- Created a linked list data structure class and used OpenFrameworks to implement the class to create and run a Snake game.
- Created a 2D Sliding Puzzle game using OpenFrameworks for the final project, which takes an image, divides it in many equal pieces and jumbles it up, which the player then has to slide along certain routes to establish the original end-configuration.

## LEADERSHIP EXPERIENCE

**Nature Club of La Martiniere for Boys | Director**

**Kolkata, India | April 2015 – December 2016**

- Served as the Chief Administrative Officer, and later, the Director of the Executive Board of the Nature Club.
- Organized weekly environmental-awareness activities such as No-Horn campaigns, Clean-up drives, and plantations.

**Socio-Cultural Fundraisers | Co-Head Organizer**

**Kolkata, India | May 2015 – November 2016**

- Organized over 5 socio-cultural fundraisers in an attempt to raise money for various causes, and hosted over 25 schools (in each fundraiser) to participate.
- Served as Co-Head Organizer and head of the Info-Tech Department in all the fundraisers.
- Each fundraiser lasted over 3 days, catered to over 1000 students and guests, and raised over \$7500, which was donated to various participating NGOs.