

# Aritra Kar

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## EDUCATION

### UNIVERSITY OF WATERLOO

#### BACHELOR OF COMPUTER SCIENCE

Sep. 2020 - Apr. 2025 | Waterloo, CA

Cheriton School of Computer Science

Cum. GPA: 3.82 / 4.0

Major GPA: 3.95 / 4.0

### SOUTH CITY INTL. SCHOOL

#### INDIAN SCHOOL CERTIFICATE (98.75%)

Graduated May 2020 | Kolkata, IN

## SKILLS

### TECHNICAL SKILLS

#### Languages:

JavaScript(ES6) • Python3 • Java

HTML5 • CSS3 • Racket/Scheme • C

#### Tools/Frameworks:

ReactJS • Node.js • Git • Firebase

MongoDB • Scikit-Learn • Pandas

Matplotlib • Seaborn • Canva

Wondershare Filmora X

### SOFT SKILLS

#### Strong:

Leadership • Communication • Teamwork

#### Languages:

English (IELTS: 8.5/9.0 | TOEFL: 118/120)

Bengali (Fluent) • Hindi (Fluent speaker)

French (Elementary)

## CERTIFICATIONS

Virtual Internship (J.P. Morgan Chase &

Co. (Software Engineering)) • Kaggle

(Python, Intermediate Machine Learning,

Data Visualization, Pandas) • Trinity

College London (Communication Skills)

## COURSEWORK

Elementary Algorithm Design and Data

Abstraction • Designing Functional

Programs • Linear Algebra 1 • Calculus 2

## INTERESTS

AI • Physics • Business • Quizzing

Music (Piano, Violin)

## EXPERIENCE

### MINDKRAFT EDUCATION INC. | SOFTWARE DEVELOPER AND CODING

#### INSTRUCTOR

May 2021 – Aug. 2021 | Oakville, CA (Remote)

- Developed curricula and lesson plans for teaching coding to kids through Java, JavaScript & Python courses.
- Conducted online classes and prepared visual aids to illustrate concepts.
- Reviewed the existing UI of the company's websites and suggested improvements and new features.

### FUTURITE EDUCATION | ROBOTICS TRAINER

May 2018 – June 2018 | Kolkata, IN

- Taught robotics concepts to children between ages 8 & 14 using LEGO EV3 kits.
- Trained kids for competitions such as World Robotics Olympiad & Technoxian.
- Demonstrated basic physics phenomena with simple machines, such as change of direction of motion using gears, et cetera.

## PROJECTS

### DOCDASH | WEBSITE, GITHUB

- Built a personal healthcare and consultation management system for doctors and patients with **ReactJS**, **Firebase**, **Vonage API** and **Material-UI** for Hack The North 2020++.

### JARVIS | GITHUB

- A personal voice assistant that uses basic deep learning to detect, classify and respond to various commands and perform 6 unique actions. Developed with **Python3** and **Tensorflow**.

### PATHFINDING VISUALIZER | WEBSITE, GITHUB

- Created web-app with **ReactJS** that visualizes the shortest possible path between two dynamically placed drag-and-drop points, featuring Dijkstra's algorithm, A\* search, BFS and DFS.

### TIC-TAC-TOE | GITHUB

- A Tic-Tac-Toe player implementing the Minimax algorithm with Alpha-Beta pruning. Implemented using **Python3**.

### COVID-19 TRACKER | WEBSITE, GITHUB

- A web-app that displays the latest global and country-wise statistics about the pandemic and visualizes the data using charts and graphs. Built with **ReactJS** and **Charts.js**.

### STATPY | GITHUB, PYPI

- Made a simple **Python** package for analysis of statistical distributions by implementing OOP principles and standard software engineering practices.

## AWARDS

2020 **The Telegraph School Awards** - Outstanding Academic Excellence

2020 **University of Waterloo** - President's Scholarship of Distinction

2020 **University of Waterloo** - Mathematics International Experience

2019 **University of Waterloo** - Certificate Of Distinction in Euclid Mathematics Contest 2019 (Top 25% worldwide)