# Vatsal Agarwal

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#### **EDUCATION**

# DELHI TECHNOLOGICAL UNIVERSITY

B.Tech - Mathematics And Computing

Expected May 2021 | Delhi, India CGPA(Till 3rd Year) - 8.96 capa

#### M.M. PUBLIC SCHOOL

Completed in 2017 | Delhi, India CBSE(2017) - 94.6%

#### FATHERSON SENIOR SEC-ONDARY PUBLIC SCHOOL

Completed in 2015 | Bijnor, India CBSE(2015) - 10.0 cgpa

#### SKILLS

- $\bullet$ C  $\bullet$  C++  $\bullet$  HTML  $\bullet$  JavaScript  $\bullet$  CSS  $\bullet$  MySQL  $\bullet$  Node.js  $\bullet$  Express  $\bullet$  MongoDB  $\bullet$  PostgreSQL  $\bullet$  Bootstrap Familiar:
- Git Firebase Socket.io React
  PHP MVC Neural Network PCA Fuzzy Logic

### COURSEWORK

#### **UNDERGRADUATE**

- Data Structures
- Algorithm Design And Analysis
- Database Management System
- Operating System
- Objected Oriented Programming
- Differential Equation
- $\bullet$  Financial Engineering

#### **ONLINE COURSES**

- Web Developer Bootcamp
- C++ With Data Structures

## **ACHIEVMENTS**

- 2017 School Topper in 10+2
- 2017 Maulik Bharat 10+2 award in association with Cultural Ministry of India
- 2015 All round performace in 10th and clearing NTSE Stage-1

### **POSITIONS**

- Corporate | Publicity | PR Organizer | Paper Reviewer | ICAPIE
- Head, Publicity, ICAPIE, 2019
- CoHead, E-cell, DTU, 2019
- Life Time Member, CAPIER, DTU
- Volunteer, ICRAPAM

#### **EXPERIENCE**

#### KUBIXSQUARE PVT. LTD. | WEB DEVELOPER INTERN

# June 2020 - Present

- Building various modules for the ERP Software to automate day-to-day tasks.
- Completed financial and registration module using Node, Express and Postgre.

#### OPTUM | UNITEDHEALTH GROUP ☑

- Online industrial training and e-learning experience in MySQL and JavaScript.

#### JPMORGAN CHASE AND CO. | INSIDESHERPA [7]

- May 2020 | ♥ Virtual Internship
- Established a Stock Price Data Feed using JPMorgan Chase frameworks and tools and displayed data visually for traders.

# BHAROSA TECHNOVERSE PVT. LTD. | WEB DEVELOPER INTERN

- Developed new web pages and modified existing content for the official website.
- Understood basics of mutual fund and acted as facilitator for WealthSimple app.
- Gained insights into backend technologies PHP, MVC, Yii, MySQL, Xampp.

#### **PROJECTS**

#### COVID-19 NEWS ☑ ( # APRIL 2020)

- Developed a portal to get latest updates on COVID-19 stats and news.
- Incorporated statewise COVID-19 numbers and statistical representation using graphs.

# INTRUSION DETECTION SYSTEM WITH DEEP NEURAL NETWORK ON CSE-CIC-IDS2018 7 | ONGOING RESEARCH PAPER (

MOV 2019 - PRESENT)

- Pre-processed data with 15 Million+ entries with 80 features. Reduced features to get 34 distinct features using PCA.
- $\bullet$  Developed a Deep Learning model trained predicted network intrusion with 99.45% accuracy.

#### ETHICAL HACKING | CRYPTUS SECURITY PVT. LTD. ( ☐ FEB 19)

- Made a payload check and prepared it to attack and exploit the sample android, which can be operated from host of payload.
- Created a credential harvester which makes victim enter their credentials and send them to host.

## DTU DEVELOPERS NETWORK ( Jan 2019 - March 2019)

- Developed a college exclusive portal that aims to inculcate a more opportunistic coding environment among budding coders.
- Developed complete User Interface and parts of backend; involved in the RnD work along with the core team.
- Technical Specifications: Bootstrap, Express, NodeJS, MongoDB; and various Middleware: passport, nodemailer, multer.

# PUBLICATION - STUDY AND APPLICATIONS OF FUZZY SYSTEMS IN DOMESTIC PRODUCTS | LNME, SPRINGER (ISSN: 2195-4356)

- Studied about fuzzy logic, its model, MATLAB implementation and discussed its application in various domestic products.
- Suggested its application in domestic iron and discussed benefits.