

# Avi Kumar Singh

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## EDUCATION

### NIT, TRICHY - B.TECH

MAJOR IN COMPUTER SCIENCE

MINOR IN ECONOMICS

Expected May 2022 | Trichy, India

Cum. GPA: 8.30/10.0

### DEVI ACADEMY SENIOR SECONDARY SCHOOL

GRAD. APRIL 2016 | CHENNAI

CBSE : CGPA - 10.0/10.0

GRAD. APRIL 2018 | CHENNAI

CBSE : 93.6 %

## LINKS

GitHub: @avikumar15

LinkedIn: @avi-kumar-singh-1508

Codeforces: @avikumar15

HackerRank: @avikumar15

## COURSEWORK

Data Structure & Algorithms

Database Management System

Machine Learning

Artificial Intelligence

Operating System

Formal Languages and Automata

Combinatorics Graph Theory

## SKILLS

### PROGRAMMING

PROGRAMMING LANGUAGES

• C • C++ • Java • Kotlin • Python

FAMILIAR LANGUAGES

• C# • Go • JavaScript

TOOLS/TECH

• CircleCI • Firebase • Game Dev

• Git • JUnit Tests • ML • Mobile Dev

• Scrapping • Scripts • Web Dev

Misc

• Android Jetpack • gRPC

• Coroutines • MVVM

### CO CURRICULAR

• Volunteering Exchange to Hanoi

• An online mentor of maths for underprivileged students.

• Team Leader Business

Development at AIESEC in NITT

## EXPERIENCE

### DAILYOBJECTS | APPLICATION DEVELOPMENT INTERNSHIP

December 2019 – January 2020 | New Delhi, India

- Revamped the UI/UX of the **android app** at DailyObjects. Changes impacted 100,000+ app user. ([app-link](#))
- **Test** driven development.
- Simplified the app codebase by using **jetpack libraries**.

### DELTA FORCE | SOFTWARE DEVELOPER

July 2019 – Present | NIT Trichy, India

- Official Coding Club and **web-team** of NIT Trichy. ([Delta Force](#))
- Developed multiple android and web-apps for college fests. ( [Pragyan '20](#), [Aaveg '20](#), [NITTFEST '20](#), [Festember '19](#)) Festember'19 has 5000+ downloads.
- Mentored a project for Delta Winter of Code 2019-20. ([project link](#))
- Organised algos bootcamp and mentored freshers ([App and Game dev](#))

### VORTEX | WebOps | EVENT COORDINATOR

Jan 2020 – Present | NIT Trichy, India

- Coordinated Events of Vortex'20, the Annual National level technical symposium of CSE department, NIT Trichy. Now part of the **web operations** team.

## TECHNICAL PROJECTS

### QUICK MAIL CLI | PYTHON CLI | GITHUB - quick-mail-cli | PyPI

Dec 2020 – Jan 2021

- A **command-line interface** to send mail quickly and without any hassle.
- Used **argparse** and **google client library**. Followed the concept of abstraction using **zope**.

### STOCK PRICE PREDICTION | ML | GITHUB - ARIMA-GARCH-modeling

Nov 2020

- A **Machine Learning model** to predict stock prices of firms, by using **ARIMA-GARCH modeling** and **sentiment analysis** using **VADER**.
- When tested, our model was found over **95%** accurate.

### DALAL STREET | VIRTUAL STOCK EXCHANGE GAME | Web Link

September 2019 - March 2020

- The game has it's backend in **Go** and **GRPC** is used to manage communication between backend and frontend. ([server code](#))
- The frontend is implemented in both app and web. ([app code](#)) ([web code](#))
- Implemented push notification, OTP and referral code features in app.

### AUTOMATE | E-RICKSHAW TRACKING APP | ANDROID APP | SPRING BOOT

February 2020

- A pooling based cab booking application using **Google Map API**.
- A **dijkstra based algorithm** is used which assigns rickshaw to the passenger. Factors like auto capacity, ETA, destination are considered in this algorithm.

## AWARDS

2020 Top 250 teams out of 2500+ teams  
2020 Top 7 teams/ 50 teams  
2018 Top 8 teams/ 200 teams

Hackverse'20 organised by NITK  
Transfinitte'20 organised by NITT  
Qualified for NumPy second round