

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: 8.39/10.00

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](https://github.com/avikumar15)

LinkedIn: [@avi-kumar-singh-1508](https://www.linkedin.com/in/avi-kumar-singh-1508)

Codeforces: [@avikumar15](https://codeforces.com/profile/avikumar15)

HackerRank: [@avikumar15](https://www.hackerrank.com/avikumar15)

COURSEWORK

Data Structure & Algorithms

Database Management System

Machine Learning

Artificial Intelligence

Operating System

Formal Languages and Automata

Combinatorics Graph Theory

SKILLS

PROGRAMMING LANGUAGES

• C • C++ • Java • Kotlin • Python

FAMILIAR LANGUAGES

• JavaScript

TOOLS/Frameworks

• CircleCI • Docker • Firebase • Git
• Helidon MP • JUnit Tests • NLTK
• NumPy • PyTorch • React • Scrapping
• Spring Boot • VADER

MISC

• Android Jetpack • Coroutines
• Game Dev • gRPC • ML • Mobile Dev
• MVVM • Scripts • Web Dev

CO-CURRICULAR

- [Volunteering Exchange](#) to Hanoi
- **Team Leader** Business Development at AIESEC in NITT
- **Online mentor** of maths for underprivileged students.

EXPERIENCE

ORACLE | APPLICATION DEVELOPMENT INTERNSHIP

June 2021 – July 2021 | Work From Home

- Developed a utility tool from **scratch** using **Helidon MP Framework**. This tool **prevents failure scenarios** in provisioning of pods by tracking resources' availability status from **Oracle Cloud Infrastructure** using **OCI-CLI**.
- Wrote a cron job script using **Python** which is connected to a **slack bot**. This script acts as an **alerting mechanism** (in case of shortage of capacity) for admin.
- Created a responsive **react application** for admin to overview current OCI capacity.

VORTEX | WEBOPS | EVENT COORDINATOR

Jan 2020 – Present | NIT Trichy, India

- Coordinated Events of Vortex'20 & Vortex'21, the **Annual National level technical symposium** of CSE department, NIT Trichy. Developed the Vortex'21 **android app**.

DELTA FORCE | SOFTWARE DEVELOPER

July 2019 – Present | NIT Trichy, India

- Official coding club and **web-team** of NIT Trichy.
- 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**)

TECHNICAL PROJECTS

YAYS BOT | ANDROID | FLASK | ML | GITHUB - [Yays Bot](#)

Mar 2021

- Developed a complete mental health chatbot tool by utilising a **Feed-Forward Neural Network** for the model, and **Flask** framework for backend.
- Created an **android app** to communicate with model.

QUICK MAIL CLI | PYTHON | CLI | GITHUB - [quick-mail-cli](#) | [PyPI](#)

Dec 2020 – Present

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

STOCK PRICE PREDICTION | ML | GITHUB - [ARIMA-GARCH-modeling](#)

Nov 2020

- Modelled a **Machine Learning model** to predict stock prices of firms, by using **ARIMA-GARCH modeling** and **sentiment analysis** using **VADER**.
- Achieved a **95% accurate** model.

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

February 2020

- Designed a pooling based cab booking application using **Google Map API**.
- Applied 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 7 teams/ 50 teams	Transfinitte'20 organised by NITT
2020	Top 250 teams/ 2500 teams	Hackverse'20 organised by NITK
2018	Top 8 teams/ 200 teams	Qualified for NumPy second round (Vortex '19)